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CM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:19 ; Search time 12.25 Seconds
(without alignments)
59.001 Million cell updates/sec

Title: US-09-603-832-5

Perfect score: 86

Sequence: 1 NDWEDRYRENMYR 14

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:
1: /cgn2_6/ptodata/2/1aa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/1aa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/1aa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/1aa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/1aa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/1aa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	254	1	US-08-242-188-1
2	86	100.0	254	1	US-08-509-261A-1
3	86	100.0	254	1	US-08-660-626-7
4	86	100.0	254	1	US-08-692-892-1
5	86	100.0	254	2	US-08-713-939A-1
6	86	100.0	254	2	US-08-668-162A-21
7	86	100.0	254	3	US-09-031-168-7
8	86	100.0	254	3	US-09-128-450-19
9	86	100.0	254	3	US-09-128-450-28
10	86	100.0	254	3	US-09-036-579-1
11	86	100.0	254	4	US-09-823-494-19
12	86	100.0	254	4	US-09-823-494-28
13	86	100.0	254	4	US-09-550-374-1
14	86	100.0	254	4	US-09-431-887-20
15	86	100.0	254	4	US-09-431-887-21
16	86	100.0	254	4	US-09-431-887-22
17	86	100.0	254	4	US-09-627-218B-10
18	86	100.0	254	4	US-09-943-906-1
19	86	100.0	254	4	US-09-669-516C-7
20	86	100.0	31	1	US-08-244-701B-8
21	86	100.0	31	1	US-08-076-721-8
22	86	100.0	31	1	US-08-556-823-2
23	86	100.0	208	3	US-09-128-450-18
24	86	100.0	208	4	US-09-823-494-18
25	86	100.0	245	4	US-09-431-887-5
26	86	100.0	245	4	US-09-431-887-15
27	86	100.0	252	4	US-09-431-887-13

28	77	89.5	252	4	US-09-431-887-17	Sequence 17, Appl
29	77	89.5	252	4	US-09-431-887-32	Sequence 32, Appl
30	77	89.5	253	4	US-09-431-887-3	Sequence 3, Appl
31	77	89.5	253	4	US-09-431-887-7	Sequence 7, Appl
32	77	89.5	253	4	US-09-431-887-9	Sequence 9, Appl
33	77	89.5	253	4	US-09-431-887-10	Sequence 10, Appl
34	77	89.5	253	4	US-09-431-887-11	Sequence 11, Appl
35	77	89.5	253	4	US-09-431-887-12	Sequence 12, Appl
36	77	89.5	253	4	US-09-431-887-14	Sequence 14, Appl
37	77	89.5	253	4	US-09-431-887-16	Sequence 16, Appl
38	77	89.5	253	4	US-09-431-887-18	Sequence 18, Appl
39	77	89.5	254	3	US-09-128-450-26	Sequence 26, Appl
40	77	89.5	254	4	US-09-823-494-26	Sequence 26, Appl
41	77	89.5	254	4	US-09-431-887-23	Sequence 23, Appl
42	77	89.5	255	1	US-08-242-188-4	Sequence 4, Appl
43	77	89.5	255	1	US-08-509-261A-4	Sequence 4, Appl
44	77	89.5	255	1	US-08-660-626-10	Sequence 10, Appl
45	77	89.5	255	1	US-08-692-892-4	Sequence 4, Appl

ALIGNMENTS

RESULT 1
US-08-242-188-1
Sequence 1, Application US/08242188
Patent No. 555186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicovic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicovic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-242-188-1
Query Match 100.0%; Score 86; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NDWEDRYRENMYR 14

Db 142 NDWEDRYRENMYR 155

RESULT 2

US-08-509-261A-1
 ; Sequence 1, Application US/08509261A
 ; Patent No. 5763244
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; APPLICANT: Telling, Glenn
 ; TITLE OF INVENTION: Method of Detecting Prions
 ; TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Bozicevic & Reed, LLP
 ; STREET: 285 Hamilton Avenue, Suite 200
 ; CITY: Palo Alto
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94301
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FASTSEQ for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/509,261A
 ; FILING DATE: 31-JUL-1995
 ; CLASSIFICATION: 800
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER:
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bozicevic, Karl
 ; REGISTRATION NUMBER: 28,807
 ; REFERENCE/DOCKET NUMBER: 6510-030001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650-327-3400
 ; TELEFAX: 650 327-3221
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 1:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 254 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; US-08-509-261A-1
 ; Query Match 100.0%; Score 86; DB 1; Length 254;
 ; Best Local Similarity 100.0%; Pred. No. 4,3e-06;
 ; Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
 Db 142 NDWEDRYRENMYR 155

RESULT 3

US-08-660-626-7
 ; Sequence 7, Application US/08660626
 ; Patent No. 5789655
 ; GENERAL INFORMATION:
 ; APPLICANT: Stanley B. Prusiner
 ; APPLICANT: Glenn C. Telling
 ; APPLICANT: Fred E. Cohen
 ; APPLICANT: Michael R. Scott
 ; TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
 ; TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
 ; NUMBER OF SEQUENCES: 13
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100
 CITY: Menlo Park
 STATE: California
 COUNTRY: USA
 ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Acciii
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/660,626
 FILING DATE:
 CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg
 REGISTRATION NUMBER: 35,127
 REFERENCE/DOCKET NUMBER: 07532/003001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 322-5070
 TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:
 LENGTH: 254 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 ORIGINAL SOURCE:
 ORGANISM: MOUSE PRION PROTEIN, MOPrP
 US-08-660-626-7

Query Match 100.0%; Score 86; DB 1; Length 254;
 Best Local Similarity 100.0%; Pred. No. 4,3e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
 Db 142 NDWEDRYRENMYR 155

RESULT 4

US-08-692-892-1
 ; Sequence 1, Application US/08692892
 ; Patent No. 5792901
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; APPLICANT: Telling, Glenn
 ; TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
 ; TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAVE
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Karl Bozicevic
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/692,892
 ; FILING DATE: 30-JULY-1996
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bozicevic, Karl
 ; REGISTRATION NUMBER: 28,807
 ; REFERENCE/DOCKET NUMBER: 06510/056001
 ; TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-692-892-1

Query Match 100.0%; Score 86; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 142 NDWEDRYRENMYR 155

RESULT 5
US-08-713-939A-1
Sequence 1, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-1

Query Match 100.0%; Score 86; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NDWEDRYRENMYR 14

Db 142 NDWEDRYRENMYR 155

RESULT 6
US-08-868-162A-21
Sequence 21, Application US/08868162A
Patent No. 5962569
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kareko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-868-162A-21

Query Match 100.0%; Score 86; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 142 NDWEDRYRENMYR 155

RESULT 7
US-09-031-168-7
Sequence 7, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

TITLE OF INVENTION: EPIPOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES: 13
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031.168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660.626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valera Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MOEPr
US-09-031-168-7

Query Match 100.0%; Score 86; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENNYR 14
DB 142 NDWEDRYRENNYR 155

RESULT 8
US-09-128-450-19
Sequence 19, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
TITLE OF INVENTION: Protein
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentln Ver. 2.0
SEQ ID NO 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-19

Query Match 100.0%; Score 86; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENNYR 14
DB 142 NDWEDRYRENNYR 155

RESULT 9
US-09-128-450-28
Sequence 28, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
TITLE OF INVENTION: Protein
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentln Ver. 2.0
SEQ ID NO 28
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-28

Query Match 100.0%; Score 86; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENNYR 14
DB 142 NDWEDRYRENNYR 155

RESULT 10
US-09-036-579-1
Sequence 1, Application US/09036579
Patent No. 6280954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875


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TELEX:
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-036-579-1

Query Match          100.0%; Score 86; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
Db      142 NDWEDRYRENMYR 155

RESULT 11
US-09-823-494-19
; Sequence 19, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Priola, Susette
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 19
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-823-494-19

Query Match          100.0%; Score 86; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
Db      142 NDWEDRYRENMYR 155

RESULT 12
US-09-823-494-28
; Sequence 28, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 28
; LENGTH: 254
; TYPE: PRT
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ORGANISM: Mus musculus
US-09-823-494-28

Query Match          100.0%; Score 86; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
Db      142 NDWEDRYRENMYR 155

RESULT 13
US-09-550-374-1
; Sequence 1, Application US/09550374
; Patent No. 6372214
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/550,374
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/036,579
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/059001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-5277
; TELEFAX: 415-854-0875
; TELEX:
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-550-374-1

Query Match          100.0%; Score 86; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 4.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
Db      142 NDWEDRYRENMYR 155

RESULT 14
US-09-431-887-20
; Sequence 20, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
```

TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE

FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/09/431,887

CURRENT FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04
 NUMBER OF SEQ ID NOS: 37

SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 20

LENGTH: 254

TYPE: PRT

ORGANISM: Mus sp.

US-09-431-887-20

Query Match 100.0%; Score 86; DB 4; Length 254;
 Best Local Similarity 100.0%; Pred. No. 4.3e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDWEDRYRYRNMVYR 14
 |||||
 DB 142 NDWEDRYRYRNMVYR 155

RESULT 15
 US-09-431-887-21
 Sequence 21, Application US/09431887

Patent No. 6534036

GENERAL INFORMATION:

APPLICANT: D-gen Limited

TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE

FILE REFERENCE: ICOT/P21952

CURRENT APPLICATION NUMBER: US/09/431,887

CURRENT FILING DATE: 1999-11-02

PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04

NUMBER OF SEQ ID NOS: 37

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 21

LENGTH: 254

TYPE: PRT

ORGANISM: Mus sp.

US-09-431-887-21

Query Match 100.0%; Score 86; DB 4; Length 254;
 Best Local Similarity 100.0%; Pred. No. 4.3e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDWEDRYRYRNMVYR 14
 |||||
 DB 142 NDWEDRYRYRNMVYR 155

Search completed: April 30, 2004, 15:33:04
 Job time : 13.25 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:19 ; Search time 12.25 Seconds
(without alignments)
59.001 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71
Sequence: 1 CWNITIKQVTTTT 14

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*
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2: /cgn2_6/ptodata/2/1aa/5B_COMB.pep.*
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6: /cgn2_6/ptodata/2/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	60.5	85.2	33	1	US-08-244-701B-36 Sequence 36, Appl
2	60.5	85.2	33	4	US-08-076-721-36 Sequence 36, Appl
3	60.5	85.2	142	1	US-08-556-823-2 Sequence 2, Appl
4	60.5	85.2	142	1	US-08-556-823-10 Sequence 10, Appl
5	60.5	85.2	208	3	US-09-128-450-18 Sequence 18, Appl
6	60.5	85.2	208	4	US-09-823-494-18 Sequence 18, Appl
7	60.5	85.2	245	4	US-09-431-887-5 Sequence 5, Appl
8	60.5	85.2	245	4	US-09-431-887-15 Sequence 15, Appl
9	60.5	85.2	252	4	US-09-431-887-13 Sequence 13, Appl
10	60.5	85.2	252	4	US-09-431-887-17 Sequence 17, Appl
11	60.5	85.2	253	1	US-08-242-188-2 Sequence 2, Appl
12	60.5	85.2	253	1	US-08-509-261A-2 Sequence 2, Appl
13	60.5	85.2	253	1	US-08-660-626-8 Sequence 8, Appl
14	60.5	85.2	253	1	US-08-692-892-2 Sequence 2, Appl
15	60.5	85.2	253	2	US-08-713-939A-2 Sequence 2, Appl
16	60.5	85.2	253	2	US-08-868-162A-22 Sequence 22, Appl
17	60.5	85.2	253	3	US-09-031-168-8 Sequence 8, Appl
18	60.5	85.2	253	3	US-09-128-450-20 Sequence 20, Appl
19	60.5	85.2	253	3	US-09-036-579-2 Sequence 2, Appl
20	60.5	85.2	253	4	US-09-823-494-20 Sequence 20, Appl
21	60.5	85.2	253	4	US-09-550-374-2 Sequence 2, Appl
22	60.5	85.2	253	4	US-09-431-887-1 Sequence 1, Appl
23	60.5	85.2	253	4	US-09-431-887-2 Sequence 2, Appl
24	60.5	85.2	253	4	US-09-431-887-3 Sequence 3, Appl
25	60.5	85.2	253	4	US-09-431-887-4 Sequence 4, Appl
26	60.5	85.2	253	4	US-09-431-887-7 Sequence 7, Appl
27	60.5	85.2	253	4	US-09-431-887-8 Sequence 8, Appl

28	60.5	85.2	253	4	US-09-431-887-9 Sequence 9, Appl
29	60.5	85.2	253	4	US-09-431-887-10 Sequence 10, Appl
30	60.5	85.2	253	4	US-09-431-887-11 Sequence 11, Appl
31	60.5	85.2	253	4	US-09-431-887-12 Sequence 12, Appl
32	60.5	85.2	253	4	US-09-431-887-14 Sequence 14, Appl
33	60.5	85.2	253	4	US-09-431-887-16 Sequence 16, Appl
34	60.5	85.2	253	4	US-09-431-887-18 Sequence 18, Appl
35	60.5	85.2	253	4	US-09-431-887-19 Sequence 19, Appl
36	60.5	85.2	253	4	US-09-943-906-2 Sequence 2, Appl
37	60.5	85.2	253	4	US-09-669-516C-8 Sequence 8, Appl
38	60.5	85.2	253	4	US-09-919-172-57 Sequence 57, Appl
39	60.5	85.2	253	4	US-09-976-594-72 Sequence 72, Appl
40	60.5	85.2	254	1	US-08-242-168-1 Sequence 1, Appl
41	60.5	85.2	254	1	US-08-509-261A-1 Sequence 1, Appl
42	60.5	85.2	254	1	US-08-660-626-7 Sequence 7, Appl
43	60.5	85.2	254	1	US-08-692-892-1 Sequence 1, Appl
44	60.5	85.2	254	2	US-08-713-939A-1 Sequence 1, Appl
45	60.5	85.2	254	2	US-08-868-162A-21 Sequence 21, Appl

ALIGNMENTS

RESULT 1
US-08-244-701B-36
Sequence 36, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Panucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 36:
SEQUENCE CHARACTERISTICS:
LENGTH: 33 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label=X
OTHER INFORMATION: of y may be absent or present independently
OTHER INFORMATION: "X" denotes one or amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 33

OTHER INFORMATION: /label= Y
OTHER INFORMATION: /note= "Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-36

Query Match 85.2%; Score 60.5; DB 1; Length 33;
Best Local Similarity 93.3%; Pred. No. 0.00056;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
Db 7 CWNITIKQHTVTTTT 21

RESULT 2
US-09-076-721-36
Sequence 36, Application US/09076721

PATENT No. 6379905

GENERAL INFORMATION:

APPLICANT: Fishleigh, Robert V.

APPLICANT: Robson, Barry

APPLICANT: Mee, Roger P.

TITLE OF INVENTION: Fragments of Prion Proteins

NUMBER OF SEQUENCES: 67

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Pennie & Edmonds

STREET: 1155 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: U.S.A.

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/076,721

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/244,701

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.

REGISTRATION NUMBER: 30,256

REFERENCE/DOCKET NUMBER: 8080-007

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 790-9090

TELEFAX: (212) 869-8864/9741

TELEX: 66141 PENNTE

INFORMATION FOR SEQ ID NO: 36:

SEQUENCE CHARACTERISTICS:

LENGTH: 33 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

FEATURE:

NAME/KEY: Modified-site

LOCATION: 1

OTHER INFORMATION: /label= X

OTHER INFORMATION: /note= "X may be absent or present independently

OTHER INFORMATION: of Y and denotes one or amino acid(s)"

FEATURE:

NAME/KEY: Modified-site

LOCATION: 33

OTHER INFORMATION: /label= Y

OTHER INFORMATION: /note= "Y may be absent or present independently

OTHER INFORMATION: of X and denotes one or more amino acid(s)"

Best Local Similarity 93.3%; Pred. No. 0.00056;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
Db 7 CWNITIKQHTVTTTT 21

RESULT 3
US-08-556-823-2
Sequence 2, Application US/08556823

PATENT No. 5750361

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko

APPLICANT: Fred E. Cohen

TITLE OF INVENTION: Formation and use of prion protein

NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ASCII

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/556,823

FILING DATE:

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Greg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 142 amino acids

TYPE: amino acid

STRANDEDNESS: linear

TOPOLOGY: linear

MOLECULE TYPE: peptide

FEATURE:

NAME/KEY: Modified-site

LOCATION: 1

OTHER INFORMATION: /label= X

OTHER INFORMATION: /note= "X may be absent or present independently

OTHER INFORMATION: of Y and denotes one or amino acid(s)"

FEATURE:

NAME/KEY: Modified-site

LOCATION: 33

OTHER INFORMATION: /label= Y

OTHER INFORMATION: /note= "Y may be absent or present independently

OTHER INFORMATION: of X and denotes one or more amino acid(s)"

FEATURE:

NAME/KEY: Modified-site

LOCATION: 10

OTHER INFORMATION: /label= X

OTHER INFORMATION: /note= "X may be absent or present independently

OTHER INFORMATION: of Y and denotes one or amino acid(s)"

FEATURE:

NAME/KEY: Modified-site

LOCATION: 100

Query Match 85.2%; Score 60.5; DB 4; Length 33;

Query Match 85.2%; Score 60.5; DB 1; Length 142;
Best Local Similarity 93.3%; Pred. No. 0.0029;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

CITY: Menlo Park
 STATE: California
 COUNTRY: USA
 ZIP: 94025
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Asclit
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/556,823
 FILING DATE:
 CLASSIFICATION: 530
 ATTORNEY/AGENT INFORMATION:
 NAME: Valera Gregg
 REGISTRATION NUMBER: 35,127
 REFERENCE/DOCKET NUMBER: 07532/003001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 322-5070
 TELEFAX: (415) 854-0875
 INFORMATION FOR SEQ ID NO: 10:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 142 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-08-556-823-10

Query Match 85.2%; Score 60.5; DB 1; Length 142;
 Best Local Similarity 93.3%; Pred. No. 0.0029;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 |||||
 Db 90 CWNITIKQHTVTTT 104

RESULT 5
 US-09-128-450-18
 ; Sequence 18, Application US/09128450
 ; Patent No. 621149
 ; GENERAL INFORMATION:
 ; APPLICANT: Chesebro, Bruce W
 ; APPLICANT: Caughey, Byron W
 ; APPLICANT: Chabry, Joelle
 ; APPLICANT: Priola, Susette
 ; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
 ; FILE REFERENCE: 50121
 ; CURRENT APPLICATION NUMBER: US/09/128,450
 ; CURRENT FILING DATE: 1998-08-03
 ; NUMBER OF SEQ ID NOS: 29
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 18
 ; LENGTH: 208
 ; TYPE: PRT
 ; ORGANISM: Hamster sp.
 ; FEATURE:
 ; NAME/KEY: NON TER
 ; LOCATION: (1)..(2)
 US-09-128-450-18

Query Match 85.2%; Score 60.5; DB 3; Length 208;
 Best Local Similarity 93.3%; Pred. No. 0.0045;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 |||||
 Db 156 CWNITIKQHTVTTT 170

RESULT 6
 US-09-823-494-18

; Sequence 18, Application US/09823494
 ; Patent No. 6355610
 ; GENERAL INFORMATION:
 ; APPLICANT: Chesebro, Bruce W
 ; APPLICANT: Caughey, Byron W
 ; APPLICANT: Chabry, Joelle
 ; APPLICANT: Priola, Susette
 ; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
 ; FILE REFERENCE: 50121
 ; CURRENT APPLICATION NUMBER: US/09/823,494
 ; CURRENT FILING DATE: 2001-03-30
 ; PRIOR APPLICATION NUMBER: 09/128,450
 ; PRIOR FILING DATE: 1998-08-03
 ; NUMBER OF SEQ ID NOS: 29
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 18
 ; LENGTH: 208
 ; TYPE: PRT
 ; ORGANISM: Hamster sp.
 ; FEATURE:
 ; NAME/KEY: NON_TER
 ; LOCATION: (1)..(2)
 US-09-823-494-18

Query Match 85.2%; Score 60.5; DB 4; Length 208;
 Best Local Similarity 93.3%; Pred. No. 0.0045;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 |||||
 Db 156 CWNITIKQHTVTTT 170

RESULT 7
 US-09-431-887-5
 ; Sequence 5, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; CURRENT FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; PRIOR FILING DATE: 1993-11-04
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus aethiops
 US-09-431-887-5

Query Match 85.2%; Score 60.5; DB 4; Length 245;
 Best Local Similarity 93.3%; Pred. No. 0.0054;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 |||||
 Db 171 CWNITIKQHTVTTT 185

RESULT 8
 US-09-431-887-15
 ; Sequence 15, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952

; CURRENT APPLICATION NUMBER: US/09/431,887
 ; CURRENT FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; PRIOR FILING DATE: 1999-11-04
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patent In Ver. 2.0
 ; SEQ ID NO 15
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus diana
 ; US-09-431-887-15

Query Match 85.2%; Score 60.5; DB 4; Length 245;
 Best Local Similarity 93.3%; Pred. No. 0.0054;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 Db 171 CWNITIKQHTVTTTT 185

RESULT 9
 ; US-09-431-887-13
 ; Sequence 13, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; CURRENT FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; PRIOR FILING DATE: 1999-11-04
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patent In Ver. 2.0
 ; SEQ ID NO 13
 ; LENGTH: 252
 ; TYPE: PRT
 ; ORGANISM: Callithrix sp.
 ; US-09-431-887-13

Query Match 85.2%; Score 60.5; DB 4; Length 252;
 Best Local Similarity 93.3%; Pred. No. 0.0055;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 Db 178 CWNITIKQHTVTTTT 192

RESULT 10
 ; US-09-431-887-17
 ; Sequence 17, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; CURRENT FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; PRIOR FILING DATE: 1999-11-04
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patent In Ver. 2.0
 ; SEQ ID NO 17
 ; LENGTH: 252
 ; TYPE: PRT
 ; ORGANISM: Cebus sp.
 ; US-09-431-887-17

Query Match 85.2%; Score 60.5; DB 4; Length 252;

Best Local Similarity 93.3%; Pred. No. 0.0055;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 Db 178 CWNITIKQHTVTTTT 192

RESULT 11
 ; US-08-242-188-2
 ; Sequence 2, Application US/08242188
 ; Patent No. 5565186
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
 ; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Karl Bosicovic
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/242,188
 ; FILING DATE: 13-MAY-1994
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bosicovic, Karl
 ; REGISTRATION NUMBER: 28,807
 ; REFERENCE/DOCKET NUMBER: 06510/014001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 854-5277
 ; TELEFAX: (415) 854-0875
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 253 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; ORIGINAL SOURCE:
 ; ORGANISM: HUMAN PRION PROTEIN, HuPrP
 ; US-08-242-188-2

Query Match 85.2%; Score 60.5; DB 1; Length 253;
 Best Local Similarity 93.3%; Pred. No. 0.0056;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 Db 179 CWNITIKQHTVTTTT 193

RESULT 12
 ; US-08-509-261A-2
 ; Sequence 2, Application US/08509261A
 ; Patent No. 5763244
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; APPLICANT: Telling, Glenn
 ; TITLE OF INVENTION: Method of Detecting Prions
 ; TITLE OF INVENTION: in a Sample and Transgenic Animal Used fore
 ; NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-2

Query Match 85.2%; Score 60.5; DB 1; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0056;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14
Db 179 CWNITIKQTVTTT 193

RESULT 13
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asciti
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:

NAME: Valecia Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 85.2%; Score 60.5; DB 1; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0056;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14
Db 179 CWNITIKQTVTTT 193

RESULT 14
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 85.2%; Score 60.5; DB 1; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0056;

Matches 14, Conservative 0, Mismatches 0, Indels 1, Gaps 1,
QY 1 CWNITIKQ-TVTTT 14
Db 179 CWNITIKQHTVTTT 193

RESULT 15

US-08-713-939A-2
; Sequence 2, Application US/08713939A
; Patent No. 584653
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,939A
; FILING DATE: 13-SEP-1996
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; ATTORNEY/AGENT INFORMATION:
; FILING DATE:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/059001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-5277
; TELEFAX: 415-854-0875
; TELEX:
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 253 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 85.2%; Score 60.5; DB 2; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0056;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14
Db 179 CWNITIKQHTVTTT 193

Search completed: April 30, 2004, 15:33:04
Job time : 12.25 secs

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:19 ; Search time 17.5 Seconds
(without alignments)
59.001 Million cell updates/sec

Title: US-09-603-832-7

Sequence: 1 ETDVKNMERVVEQMCVTQYQ 20

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Gapop 10.0, Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

Issued_Patents_AA:
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3: /cgn2_6/ptodata/2/1aa/6A_CONB.pep:*
4: /cgn2_6/ptodata/2/1aa/6B_CONB.pep:*
5: /cgn2_6/ptodata/2/1aa/PCTUS_CONB.pep:*
6: /cgn2_6/ptodata/2/1aa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	254	1	US-08-242-188-1
2	103	100.0	254	1	US-08-509-261A-1
3	103	100.0	254	1	US-08-660-626-7
4	103	100.0	254	1	US-08-692-892-1
5	103	100.0	254	2	US-08-713-939A-1
6	103	100.0	254	2	US-08-868-162A-21
7	103	100.0	254	3	US-09-031-168-7
8	103	100.0	254	3	US-09-128-450-19
9	103	100.0	254	3	US-09-128-450-28
10	103	100.0	254	3	US-09-036-579-1
11	103	100.0	254	4	US-09-823-494-19
12	103	100.0	254	4	US-09-823-494-28
13	103	100.0	254	4	US-09-550-374-1
14	103	100.0	254	4	US-09-431-887-20
15	103	100.0	254	4	US-09-431-887-21
16	103	100.0	254	4	US-09-431-887-22
17	103	100.0	254	4	US-09-431-887-23
18	103	100.0	254	4	US-09-627-218B-10
19	103	100.0	254	4	US-09-943-906-1
20	103	100.0	254	4	US-09-669-516C-7
21	102	99.0	263	1	US-08-242-188-3
22	102	99.0	263	1	US-08-509-261A-3
23	102	99.0	263	1	US-08-660-626-9
24	102	99.0	263	1	US-08-692-892-3
25	102	99.0	263	2	US-08-713-939A-3
26	102	99.0	263	2	US-08-868-162A-23
27	102	99.0	263	3	US-09-031-168-9

28	102	99.0	263	3	US-09-036-579-3	Sequence 3, Appl
29	102	99.0	263	4	US-09-550-374-3	Sequence 3, Appl
30	102	99.0	263	4	US-09-943-906-3	Sequence 3, Appl
31	102	99.0	263	4	US-09-669-516C-9	Sequence 26, Appl
32	101	98.1	256	4	US-09-431-887-26	Sequence 21, Appl
33	101	98.1	264	3	US-09-128-450-21	Sequence 21, Appl
34	101	98.1	264	4	US-09-823-494-21	Sequence 27, Appl
35	101	98.1	264	4	US-09-431-887-24	Sequence 24, Appl
36	101	98.1	264	4	US-09-431-887-27	Sequence 11, Appl
37	101	98.1	264	4	US-09-627-218B-11	Sequence 10, Appl
38	99	96.1	142	1	US-08-556-823-10	Sequence 5, Appl
39	99	96.1	245	4	US-09-431-887-5	Sequence 15, Appl
40	99	96.1	245	4	US-09-431-887-15	Sequence 17, Appl
41	99	96.1	252	4	US-09-431-887-17	Sequence 2, Appl
42	99	96.1	252	4	US-09-431-887-17	Sequence 2, Appl
43	99	96.1	253	1	US-08-242-188-2	Sequence 2, Appl
44	99	96.1	253	1	US-08-509-261A-2	Sequence 8, Appl
45	99	96.1	253	1	US-08-660-626-8	

ALIGNMENTS

RESULT 1
US-08-242-188-1
Sequence 1, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-242-188-1
Query Match 100.0%; Score 103; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ETDVKNMERVVEQMCVTQYQ 20

Db 199 ETDVKMERVVEQMCVTOYQ 218

RESULT 2

US-08-509-261A-1

Sequence 1, Application US/08509261A

Patent No. 5763244

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.

APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn

TITLE OF INVENTION: Method of Detecting Prions

TITLE OF INVENTION: In a Sample and Transgenic Animal Used for

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: Bozicevic & Reed, LLP

STREET: 285 Hamilton Avenue, Suite 200

CITY: Palo Alto

STATE: CA

COUNTRY: USA

ZIP: 94301

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/509,261A

FILING DATE: 31-JUL-1995

CLASSIFICATION: 800

PRIOR APPLICATION NUMBER:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 6510-030001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-327-3400

TELEFAX: 650-327-3231

TELEX:

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-509-261A-1

Query Match 100.0%; Score 103; DB 1; Length 254;

Best Local Similarity 100.0%; Pred. No. 8,4e-10;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 ETDVKMERVVEQMCVTOYQ 20

Db 199 ETDVKMERVVEQMCVTOYQ 218

RESULT 3

US-08-660-626-7

Sequence 7, Application US/08660626

Patent No. 5789655

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner

APPLICANT: Glenn C. Telling

APPLICANT: Fred E. Cohen

APPLICANT: Michael R. Scott

TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS

NUMBER OF SEQUENCES: 13

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ASCII

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/660,626

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

ORIGINAL SOURCE:

ORGANISM: MOUSE PRION PROTEIN, MoPrP

US-08-660-626-7

Query Match 100.0%; Score 103; DB 1; Length 254;

Best Local Similarity 100.0%; Pred. No. 8,4e-10;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 ETDVKMERVVEQMCVTOYQ 20

Db 199 ETDVKMERVVEQMCVTOYQ 218

RESULT 4

US-08-692-892-1

Sequence 1, Application US/08692892

Patent No. 5792901

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.

APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn

TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND

TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: Karl Bozicevic

STREET: 2200 Sand Hill Road

CITY: Menlo Park

STATE: CA

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/692,892

FILING DATE: 30-JULY-1996

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/056001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-692-992-1

Query Match 100.0%; Score 103; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 8,4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
|||||
Db 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 5
US-08-713-939A-1
Sequence 1, Application US/08713939A
Patent No. 5846533 ✓
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-1

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 8,4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20

Db 199 ETDVMMERVVEQMCVTQYQ 218
|||||

RESULT 6
US-08-868-162A-21
Sequence 21, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-868-162A-21

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 8,4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
|||||
Db 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 7
US-09-031-168-7
Sequence 7, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,625
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-09-031-168-7

Query Match 100.0%; Score 103; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 8,4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
DB 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 8
US-09-128-450-19
Sequence 19, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-19

Query Match 100.0%; Score 103; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 8,4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
DB 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 9
US-09-128-450-28
Sequence 28, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 28
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-28

Query Match 100.0%; Score 103; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 8,4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
DB 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 10
US-09-036-579-1
Sequence 1, Application US/09036579
Patent No. 6280954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875

TELEX:
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-036-579-1

Query Match 100.0%; Score 103; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
DB 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 11
US-09-823-494-19
; Sequence 19, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Chabry, Byron W
; APPLICANT: Priola, Joelle
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 19
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-823-494-19

Query Match 100.0%; Score 103; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
DB 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 12
US-09-823-494-28
; Sequence 28, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Chabry, Byron W
; APPLICANT: Priola, Joelle
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 28
; LENGTH: 254
; TYPE: PRT

ORGANISM: Mus musculus
US-09-823-494-28

Query Match 100.0%; Score 103; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
DB 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 13
US-09-550-374-1
; Sequence 1, Application US/09550374
; Patent No. 6372214
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/550,374
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/036,579
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/059001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-5277
; TELEFAX: 415-854-0875
; TELEX:
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-550-374-1

Query Match 100.0%; Score 103; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
DB 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 14
US-09-431-887-20
; Sequence 20, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited

```

; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-431-887-20

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Query Match          100.0%; Score 103; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 ETDVMMERVVEMQMCVTQYQ 20
Db      199 ETDVMMERVVEMQMCVTQYQ 218

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RESULT 15
US-09-431-887-21
; Sequence 21, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentn Ver. 2.0
; SEQ ID NO 21
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-431-887-21

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Query Match          100.0%; Score 103; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```

QY      1 ETDVMMERVVEMQMCVTQYQ 20
Db      199 ETDVMMERVVEMQMCVTQYQ 218

```

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Search completed: April 30, 2004, 15:33:04
Job time : 17.5 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 60 Seconds
(without alignments)
94.183 Million cell updates/sec

Title: US-09-603-832-7
Perfect score: 103
Sequence: 1 ETIDVKMERVEMCVTVQYQ 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues
Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_29Jan04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	20	4	AAB66615 Mouse prl
2	103	100.0	124	5	ABG94340 Mouse mpr
3	103	100.0	124	5	ABG80652 Mouse trl
4	103	100.0	124	7	ADD24200 mPrPt-EK
5	103	100.0	208	3	AAB07316 Mouse prl
6	103	100.0	208	3	AAB07327 Mouse prl
7	103	100.0	208	5	ABG31904 Chimera-t
8	103	100.0	209	5	ABG31905 HCNV type
9	103	100.0	211	4	AAB30801 Amino aci
10	103	100.0	225	6	ABR42793 Rat prion
11	103	100.0	226	2	ADB85240 Rat prion
12	103	100.0	254	2	AAR86714 Mouse prl
13	103	100.0	254	2	AAM69659 Mouse prl
14	103	100.0	254	2	AAM85900 Mouse prl
15	103	100.0	254	2	AAV07996 Murine pr
16	103	100.0	254	4	AAB72360 Hamster p
17	103	100.0	254	4	AAB61772 Mouse prl
18	103	100.0	254	4	AAB82118 Murine pr
19	103	100.0	254	4	AAB82111 Murine pr
20	103	100.0	254	4	AAB84522 Amino aci
21	103	100.0	254	4	AAG65852 Mouse prl
22	103	100.0	254	5	AAM50888 Mouse prl
23	103	100.0	254	5	ABP51786 Mouse prl
24	103	100.0	254	5	ABG31906 Mouse prl
25	103	100.0	254	5	ABB04427 Murine pr

26	103	100.0	254	5	AAE15602
27	103	100.0	254	5	AAE15609
28	103	100.0	254	6	AEU58867
29	103	100.0	254	6	AAE33226
30	103	100.0	254	6	ABR42792 Mouse prl
31	103	100.0	254	7	ADC59531 Mouse prl
32	103	100.0	254	7	ADC52088
33	103	100.0	254	7	ADD24194
34	103	100.0	254	7	ADP56264
35	103	100.0	254	7	ADP06737
36	103	100.0	254	7	ADP06736
37	103	100.0	254	7	ADP06739
38	103	100.0	254	7	ADP06740
39	103	100.0	255	4	AAE72357
40	103	100.0	255	4	AAE72358
41	103	100.0	255	4	AAE72359
42	103	100.0	255	5	ABG31903
43	103	100.0	350	5	ABG94339
44	103	100.0	350	5	ABG80651
45	103	100.0	350	7	ADD24199

ALIGNMENTS

RESULT 1	AAE15602	Mouse prl
ID	AAE15609	Mouse prl
XX	AAE15607	Mouse prl
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XX	AAE15341	Mouse prl
XX	AAE15340	Mouse prl

Best Local Similarity 100.0%; Pred. No. 5,5e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVQMERVVEQMCVTQYQ 20
Db 1 ETDVQMERVVEQMCVTQYQ 20

RESULT 2

ABG94340 ID ABG94340 standard; protein; 124 AA.

XX AC ABG94340;

XX DT 10-DEC-2002 (first entry)

XX DE Mouse mPrP^{Sc} protein.

XX KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
XX KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
XX KW vaccine; infectious disease.

XX OS Mus sp.

XX PN WO200256905-A2.

XX PD 25-JUL-2002.

XX PF 21-JAN-2002; 2002MO-IB000166.

XX PR 19-JAN-2001; 2001US-0262379P.

XX PR 04-MAY-2001; 2001US-0288549P.

XX PR 05-OCT-2001; 2001US-032698P.

XX PR 07-NOV-2001; 2001US-0331045P.

XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;

XX PT Piossek C;

XX PS WPI: 2002-627351/67.

XX PS Disclosure; Page 438; 441pp; English.

XX CC This invention relates to a novel ordered and repetitive antigen array
XX CC used in the production of vaccines for infectious diseases. The invention
XX CC also discloses a composition comprising a non-natural molecular scaffold
XX CC comprising a core particle selected from a core particle of a non-natural
XX CC origin and a core particle of natural origin and an organiser comprising
XX CC at least one first attachment site, where the organiser is connected to
XX CC the core particle by at least one covalent bond. Also disclosed is an
XX CC antigen or antigenic determinant with at least one second attachment
XX CC site, where the antigen or antigenic determinant is amyloid beta peptide
XX CC (Abeta1-42) or its fragment and where the second attachment site is
XX CC selected from an attachment site not naturally occurring with the antigen
XX CC or antigenic determinant and an attachment site naturally occurring with
XX CC the antigen or antigenic determinant, where the second attachment site is
XX CC capable of association through at least one non-peptide bond to the first
XX CC attachment site and where the antigen or antigenic determinant and the
XX CC scaffold interact through the association to form an ordered and
XX CC repetitive antigen array. The invention also comprises a coat protein
XX CC capable of forming a capsid which comprises mutant Qbeta coat proteins
XX CC having an amino acid sequence selected from five amino acid sequences
XX CC fully defined in the specification. The compounds of the invention may
XX CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
XX CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
XX CC immunisation and as a vaccine. The present sequence represents a protein
XX CC sequence used to create the compositions of the invention
XX CC Sequence 124 AA;

Query Match 100.0%; Score 103; DB 5; Length 124;
Best Local Similarity 100.0%; Pred. No. 3.9e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVQMERVVEQMCVTQYQ 20
Db 60 ETDVQMERVVEQMCVTQYQ 99

RESULT 3

ABG80652 ID ABG80652 standard; protein; 124 AA.

XX AC ABG80652;

XX DT 29-NOV-2002 (first entry)

XX DE Mouse truncated prion protein with C terminal cysteine containing linker.

XX KW Molecular antigen array; vaccine; antigen; antimicrobial; mutant;

XX KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutein;

XX KW graft versus host disease; IgE-mediated allergic reaction; anaphylaxis;

XX KW adult respiratory distress syndrome; ARDS; Crohn's disease;

XX KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;

XX KW Grave's disease; systemic lupus erythematosus; osteoporosis;

XX KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;

XX KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;

XX KW angiotensinogen-converting enzyme; immunoblastic lymphadenopathy;

XX KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;

XX KW enterokinase; cysteine-containing linker.

XX OS Mus sp.

XX PN WO200256907-A2.

XX PD 25-JUL-2002.

XX PF 21-JAN-2002; 2002MO-IB000168.

XX PR 19-JAN-2001; 2001US-0262379P.

XX PR 04-MAY-2001; 2001US-0288549P.

XX PR 05-OCT-2001; 2001US-032698P.

XX PR 07-NOV-2001; 2001US-0331045P.

XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX PI (MAURER) MAURER P.

XX PT (LECHNER) LECHNER F.

XX DR (ORTMANN) ORTMANN R.

XX XX (LUBO) LUBOEND R.

XX PA (STAU) STAUENBIEL M.

XX XX (FREY) FREY P.

XX PI Maurer P, Lechner F, Ortmann R, Luboend R, Stauenbiel M, Frey P;

XX PT Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

XX PS WPI: 2002-636514/68.

XX PS Molecular antigen array used in the production of vaccines for infectious

XX PT diseases.

XX PS Example 7, Page 415; 418pp; English.

XX XX The invention relates to a composition comprising: (a) a non-natural

XX CC molecular scaffold comprising: (i) a core particle selected from: (1) a

XX CC core particle of a non-natural origin; and (2) a core particle of natural

XX CC origin; and (ii) an organiser comprising at least one first attachment

XX CC site, where the organiser is connected to the core particle by at least

XX CC one covalent bond; (b) an antigen or antigenic determinant with at least

XX CC one second attachment site, where the antigen or antigenic determinant is

XX CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second

CC attachment site is selected from: (i) an attachment site not naturally occurring with the antigen or antigenic determinant; and (ii) an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site; and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. CC Also included is a process for producing a non-naturally occurring ordered and repetitive antigen array. The composition is used in CC immunisation and as a vaccine for diseases such as influenza, graft versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Graves' disease, CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia gravis, immunoproliferative disease lymphadenopathy, CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, CC osteoporosis and infectious diseases. The present sequence is a modified antigen for use in the array of the invention. The antigen is modified to CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-containing N- or C-terminal linker peptide which serves as the attachment CC point to a virus like particle or bacterial protein (the scaffold protein).

CC Sequence 124 AA;

Query Match 100.0%; Score 103; DB 5; Length 124;
Best Local Similarity 100.0%; Pred. No. 3.9e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
80 ETDVXMERVVEQMCVTQYQ 99

RESULT 4
ADD24200 standard; protein; 124 AA.

AC ADD24200;

DT 15-JAN-2004 (first entry)

DE mPrP-EK-Fc* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;

KW first attachment site; antigen; antigenic determinant; prion protein;

KW PrP, PrP peptide, vaccine; neuroprotective; antiinflammatory;

KW prion disease; Bovine Spongiform Encephalopathy; BSE;

KW Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.

OS Unidentified.

PN WO2003059386-A2.

PD 24-JUL-2003.

PF 17-JAN-2003; 2003WO-EP00460.

PR 18-JAN-2002; 2002US-00050902.

PR 21-JAN-2002; 2002WO-1B000166.

PR 08-JUL-2002; 2002US-0393725P.

PR 18-JUL-2002; 2002US-03965590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;

XX WPI; 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g. Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

PT phage) and at least one prion protein or peptide bound to the virus-like particle.

XX Example 13; SEQ ID NO 93; 246bp; English.

CC This invention relates to a novel vaccine composition comprising a virus-like or a core particle with at least one first attachment site and at least one antigen or antigenic determinant that is a prion protein (PrP) or its dimer, or a PrP peptide, the antigen or antigenic determinant being bound to the virus-like or core particle. The vaccine of the CC invention may have neuroprotective or antiinflammatory activity. The CC composition is useful as a medicament or in manufacturing a medicament for the treatment or prevention of prion diseases. The prion diseases may CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob Disease. The present sequence is the amino acid sequence of the cleaved CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*) which was used during the exemplification of the invention.

CC Sequence 124 AA;

Query Match 100.0%; Score 103; DB 7; Length 124;
Best Local Similarity 100.0%; Pred. No. 3.9e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
80 ETDVXMERVVEQMCVTQYQ 99

RESULT 5
AAB07316 standard; protein; 208 AA.

AC AAB07316;

DT 17-OCT-2000 (first entry)

DE Mouse prion protein sequence.

KW Mouse; prion protein; transmissible spongiform encephalopathy;

KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

OS Mus sp.

PN Key

FT Region

FT Disulfide-bond

FT Modified-site

FT /note= "C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

PN WO200029850-A1.

PD 25-MAY-2000.

PF 27-OCT-1999; 99WO-FI000897.

PR 17-NOV-1998; 98FI-00002481.

PA (WALL-) WALLAC OY.

PA (BSRC-) BSRC OFFICE.

PI Hope J, Barnard GJR, Birkett CR;

XX WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of transmissible spongiform encephalopathies in bovines.

XX Disclosure; Page 41-42; 50pp; English.

CC The present sequence is the mouse prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 XX
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 103; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 6.8e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVQMERVVEQMCVTQYQ 20
 DB 177 ETDVQMERVVEQMCVTQYQ 196
 RESULT 6
 AAB07327
 ID AAB07327 standard; protein, 208 AA.
 AC AAB07327;
 XX
 XX 17-OCT-2000 (first entry)
 DT
 DE Mouse prion protein sequence.
 XX
 XX Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; Prp.
 XX
 XX Mus sp.
 OS
 XX
 XX Key Location/Qualifiers
 FT 37..68
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 XX WO200029849-A1.
 PN
 XX 25-MAY-2000.
 PD
 XX 27-OCT-1999; 99WO-FI000896.
 PF
 XX 17-NOV-1998; 98FI-00002480.
 PR
 XX (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PA
 XX Hope J, Barnard GJR, Birkett CR;
 PI WPI; 2000-399778/34.
 DR
 XX New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 PT
 XX Disclosure: Page 41-42; 50pp; English.
 PS
 XX The present sequence is the mouse prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 XX
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 103; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 6.8e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVQMERVVEQMCVTQYQ 20
 DB 177 ETDVQMERVVEQMCVTQYQ 196
 RESULT 7
 ABG31904
 ID ABG31904 standard; protein, 208 AA.
 AC ABG31904;
 XX
 XX 05-NOV-2002 (first entry)
 DT
 DE Chimera-type prion protein #2.
 XX
 XX Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 KM
 XX Synthetic.
 OS
 XX
 XX WO200261418-A1.
 PN
 XX 08-AUG-2002.
 PD
 XX 31-JAN-2002; 2002MO-JP000803.
 PF
 XX 31-JAN-2001; 2001JP-00024279.
 PR
 XX (TOHO) UNIV TOHOKU.
 PA
 XX Kitamoto T, Miyoshi K, Mohri S;
 PI WPI; 2002-619277/66.
 DR
 XX Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 PT
 XX Claim 9; Page 55-57; 69pp; Japanese.
 PS
 XX This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 103; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 6.8e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVQMERVVEQMCVTQYQ 20
 DB 178 ETDVQMERVVEQMCVTQYQ 197

```

RESULT 8
ABG31905
ID ABG31905 standard; protein; 209 AA.
XX
AC ABG31905;
XX
DT 05-NOV-2002 (first entry)
XX
DE Hchv type prion protein.
XX
KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX
OS Synthetic.
XX
PN WO200261418-A1.
XX
PD 08-AUG-2002.
XX
PF 31-JAN-2002; 2002WO-JP000803.
XX
PR 31-JAN-2001; 2001JP-00024279.
XX
PA (TOHO) UNIV TOHOKU.
XX
PI Kitamoto T, Miyoshi K, Mohri S;
XX
DR WPI; 2002-619277/66.
XX
PT Screening (non-)human prion disease infection factor based on abnormal
PT prion protein sedimentation in non-human follicular dendritic cells as
PT indication. applicable in safety test on e.g. drugs and cosmetics.
XX
PS Claim 9; Page 57-58; 69pp; Japanese.
XX
CC This invention relates to a novel method for screening human or non-
CC human prion disease infection factor in a sample by using abnormal prion
CC protein sedimentation in non-human follicular dendritic cells (FDC) as
CC indication. The method of the invention is useful for screening (non-)
CC human prion disease infection factor, which is applicable in safety tests
CC on drugs like blood preparations, foods and cosmetics, and for developing
CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC disease (CJD). The method of the invention is simple and quick. The
CC present sequence represents a Chv type prion related protein of the
CC invention
XX
SQ Sequence 209 AA;
XX
Query Match 100.0%; Score 103; DB 5; Length 209;
Best Local Similarity 100.0%; Pred. No. 6,9e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ETDVKKMERVVEQMCVTQYQ 20
DB 178 ETDVKKMERVVEQMCVTQYQ 197
XX
RESULT 9
AAB30801
ID AAB30801 standard; protein; 211 AA.
XX
AC AAB30801;
XX
DT 02-APR-2001 (first entry)
XX
DE Amino acid sequence of a mouse prion protein.
XX
KM SCHAG; self-coalesce; higher-order aggregate; amyloidogenic domain;
KM aggregation; fibril; phenotypic alteration; gene therapy;
KM disease resistance; plant pigmentation; prion disease.
XX

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OS Mus sp.
XX
PN WO200075324-A2.
XX
PD 14-DEC-2000.
XX
PF 09-JUN-2000; 2000WO-US015876.
XX
PR 09-JUN-1999; 99US-0138833P.
XX
PA (ARCH-) ARCH DEV CORP.
XX
PI Lindquist S, Li L, Ma J, Liu J, Sondheimer N, Scheibel T;
XX
DR WPI; 2001-061723/07.
XX
DR N-PSDB; AAC86686.
XX
PT New nucleic acid encoding chimeric proteins with self-assembly
PT properties, useful e.g. for diagnosis and treatment of prion diseases,
PT also related aggregates, fibrils and polymers.
XX
PS Claim 11; Page 137-138; 188pp; English.
XX
CC The present sequence represents a prion protein. The specification
CC describes chimeric polypeptides, which comprise at least one SCHAG (self-
CC coalesce into higher-order aggregates) amino acid sequence fused in
CC frame with a polypeptide of interest (which is other than a marker
CC protein, a glutathione-S-transferase or a staphylococcal nuclear
CC protein). The specification also describes chimeric polypeptides that
CC comprises an amyloidogenic domain that causes aggregation into fibrils.
CC The chimeric polypeptides are used to prepare polymers with multiple
CC reactivities, e.g. derivatised with enzymes, or specific binding
CC partners, and useful e.g. for performing multi-step chemical reactions.
CC They can be used create an inducible, or stable phenotypic alteration in
CC a cell, e.g. for gene therapy, protein production, imparting disease
CC resistance to plants, altering plant pigmentation and for diagnosis and
CC treatment of prion diseases
XX
SQ Sequence 211 AA;
XX
Query Match 100.0%; Score 103; DB 4; Length 211;
Best Local Similarity 100.0%; Pred. No. 7e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ETDVKKMERVVEQMCVTQYQ 20
DB 179 ETDVKKMERVVEQMCVTQYQ 198
XX
RESULT 10
ABR42793
ID ABR42793 standard; protein; 225 AA.
XX
AC ABR42793;
XX
DT 08-SEP-2003 (first entry)
XX
DE Rat prion protein.
XX
KM Rat; prion protein; prionosis; neurotropic; neuroprotective; immunogen;
KM vaccine.
XX
OS Rattus sp.
XX
PN WO2003045128-A2.
XX
PD 05-JUN-2003.
XX
PF 21-NOV-2002; 2002WO-US037634.
XX
PR 21-NOV-2001; 2001US-0331801P.
XX
PA (UNIV ) UNIV NEW YORK STATE.
XX

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Query Match 100.0%; Score 103; DB 2; Length 254;
 Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
 DB 199 ETDVKKMERVVEQMCVTQYQ 218

RESULT 13

AAW69659 standard; protein; 254 AA.

AAW69659;

25-MAR-2003 (revised)

19-OCT-1998 (first entry)

Mouse prion protein MoPrP.

Mouse; prion protein; PrP; transgenic animal; artificial gene;

Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

Mus sp.

US5792901-A.

11-AUG-1998

30-JUL-1996; 96US-00692892.

13-MAY-1994; 94US-00242188.

31-JUL-1995; 95US-00509261.

31-AUG-1995; 95US-00521992.

(REGC) UNITV CALIFORNIA.

Scott MR, Telling GC, Prusiner SB;

WPI; 1998-456207/39.

Transgenic mouse with altered PrP gene - for detecting disease-causing prions.

Example 8; Fig 3; 37pp; English.

A transgenic mouse has been developed which comprises a genome in which both alleles of an endogenous PrP (prion protein) gene of the mouse are ablated, the genome containing operatively inserted all exogenous non-mouse PrP gene. The mouse is susceptible to infection with prions which generally only infect a genetically diverse mammal due to the presence of the exogenous PrP gene and ablated endogenous PrP gene. It exhibits symptoms of prion disease within 200 days or less after inoculation with prions which generally only infect a genetically diverse mammal. Also described in the present invention are: (A) a method of producing the transgenic mouse; and (B) determining the presence of infectious prions in a sample obtained from a bovine. The transgenic mouse is used to detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative disease of humans caused by prions. The present sequence represents mouse prion protein (MoPrP), used in an example from the present invention. (updated on 25-MAR-2003 to correct PF field.)

Sequence 254 AA;

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
 DB 199 ETDVKKMERVVEQMCVTQYQ 218

RESULT 14
 AAW85900 standard; peptide; 254 AA.

AAW85900;

12-FEB-1999 (first entry)

Mouse prion protein (PrP) sequence.

PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening; food;

Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;

cosmetic; therapeutic; mouse.

Mus sp.

US5846533-A.

13-SEP-1996; 96US-00713939.

14-SEP-1995; 95US-00528104.

(REGC) UNITV CALIFORNIA.

(SCRI) SCRIPPS RES INST.

Prusiner SB, Williamson RA, Burton DR;

WPI; 1999-058996/05.

Antibody specific for scrapie isoform of prion protein - useful for

diagnosis and therapy.

Disclosure; Col 39-42; 58pp; English.

This represents a mouse prion protein (PrP) sequence. The invention relates to an antibody that is capable of binding to native PrP(Sc), the scrapie isoform of PrP. The antibody is produced by a method that comprises synthesizing a library of antibodies on phages, contacting the phages with a composition containing PrP proteins, isolating phages that bind to native PrP(Sc) in situ, obtaining an antibody from the phages, and optionally analysing the phages to determine a nucleic acid sequence encoding an amino acid sequence to which the native PrP(Sc) binds. The antibody is used to detect disease-associated PrP, especially in Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They can also be used to neutralise the infectivity of PrP(Sc). Assays using the antibodies can be used to screen for disease-associated PrP in pharmaceutical products, foods and cosmetics or for therapeutic purposes

Sequence 254 AA;

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
 DB 199 ETDVKKMERVVEQMCVTQYQ 218

RESULT 15

AAV07996 standard; protein; 254 AA.

AAV07996;

08-JUL-1999 (first entry)

Murine prion protein.

Prion protein; PrP; human; polyclonal antiserum; immunoassay; detection;

bovine; murine.

```

XX Mus sp.
OS
XX DE19745443-A1.
XX
XX 22-APR-1999.
XX
XX 15-OCT-1997; 97DE-01045443.
XX
XX 15-OCT-1997; 97DE-01045443.
XX
XX (HERZ/) HERZOG-MESMER A.
XX
XX Mesmer AH, Kiselev OI, Scheller A;
XX
XX WPI, 1999-255775/22.
XX
XX
XX Diagnostic polyclonal antiserum specific for prion protein - obtained by
XX immunisation with metal-containing polypeptide.
XX
XX Claim 3; Fig 1; 12pp; German.
XX
XX This invention describes a novel process for producing a polyclonal
XX antiserum against a human or animal prion protein (PrP) which can be used
XX in immunoassays for detecting PrP's. The method comprises (a) selecting a
XX polypeptide that has a length of at least 10 amino acids and has an amino
XX acid sequence at least 70% homologous to that of human, bovine or murine
XX PrP in a region of at least 10 consecutive amino acids (b) binding a
XX metal to the polypeptide by reaction with a metal compound and (c)
XX injecting the metal-containing polypeptide into a host animal, optionally
XX together with adjuvants, to induce production of a polyclonal antiserum
XX
XX
XX Sequence 254 AA;
SQ
Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.5e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 ETDVCMERVVEQMCVTQYQ 20
DB 199 ETDVCMERVVEQMCVTQYQ 218

```

Search completed: April 30, 2004, 15:28:54
Job time : 61 sec

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 42 Seconds

(Without alignments)
94.183 Million cell updates/sec

Title: US-09-603-832-5

Sequence: 1 NDMEDRYRNMWR 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : A_Geneseq_29Jan04:*

1: geneseqp1980s:*\n2: geneseqp1990s:*\n3: geneseqp2000s:*\n4: geneseqp2001s:*\n5: geneseqp2002s:*\n6: geneseqp2003as:*\n7: geneseqp2003bs:*\n8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	14	4	AAB66613
2	86	100.0	15	7	ADD24281
3	86	100.0	16	5	ABG80700
4	86	100.0	16	7	ADD24285
5	86	100.0	26	5	ABG32299
6	86	100.0	26	5	ABG80699
7	86	100.0	26	7	ADD24284
8	86	100.0	27	7	ADD24288
9	86	100.0	33	3	AAB15057
10	86	100.0	42	7	ADBO6769
11	86	100.0	124	5	ABG94340
12	86	100.0	124	5	ABG80652
13	86	100.0	124	7	ADD24200
14	86	100.0	208	3	AAB07316
15	86	100.0	208	3	AAB07327
16	86	100.0	211	4	AAB30801
17	86	100.0	225	6	ABR42793
18	86	100.0	226	7	ADBS8240
19	86	100.0	254	2	AAB66714
20	86	100.0	254	2	AAB66559
21	86	100.0	254	2	AAB65500
22	86	100.0	254	2	AAY07996
23	86	100.0	254	4	AAB61772
24	86	100.0	254	4	AAB82118
25	86	100.0	254	4	AAB82111

26	86	100.0	254	4	AAB84522	AAB84522	Amino aci
27	86	100.0	254	4	AAG65852	AAG65852	Mouse pri
28	86	100.0	254	5	AAM50888	AAM50888	Mouse pri
29	86	100.0	254	5	ABP51786	ABP51786	Mouse pri
30	86	100.0	254	5	ABG31906	ABG31906	Mouse pri
31	86	100.0	254	5	ABR04427	ABR04427	Murine pr
32	86	100.0	254	5	AAE15602	AAE15602	Mouse pr
33	86	100.0	254	5	AAE15609	AAE15609	Mouse pr
34	86	100.0	254	6	ABU58867	ABU58867	Mouse pri
35	86	100.0	254	6	AAE33226	AAE33226	Mouse pr
36	86	100.0	254	6	ABR42792	ABR42792	Mouse pri
37	86	100.0	254	7	ADC59531	ADC59531	Mouse pri
38	86	100.0	254	7	ADC52088	ADC52088	Mouse pri
39	86	100.0	254	7	ADD24194	ADD24194	Mouse pri
40	86	100.0	254	7	ADE56264	ADE56264	Rat Prote
41	86	100.0	254	7	ADE06739	ADE06739	Mouse pri
42	86	100.0	254	7	ADE06740	ADE06740	Mouse pri
43	86	100.0	255	4	AAB72357	AAB72357	Murine pr
44	86	100.0	255	4	AAB72358	AAB72358	Murine pr
45	86	100.0	255	4	AAB72359	AAB72359	Murine pr

ALIGNMENTS

RESULT 1	
ID AAB66613	standard; peptide; 14 AA.
AC AAB66613;	
DT 05-APR-2001 (first entry)	
DE Mouse prion helix 1.	
KW Coiled-coil; prion; helix.	
OS Mus sp.	
PN WO200100010-A1.	
PD 04-JAN-2001.	
PF 23-JUN-2000; 2000MO-CA000736.	
PR 25-JUN-1999; 98US-0141203P.	
PA (KOND//) KONDEJEMSKI L H.	
PA (IRVI//) IRVIN R T.	
PA (HODG//) HODGES R S.	
PI Kondejewski LH, Irvin RT, Hodges RS;	
XX WPI; 2001-137855/14.	
XX	
XX Coiled-coil polypeptide compositions useful for generating antibodies	
XX against a specific epitope, comprises a specific epitope from alpha-	
XX helical surface region of a protein inserted into coiled-coil polypeptide	
XX template.	
XX	
XX Disclosure; Fig 4; 25pp; English.	
XX	
XX The present invention relates to a coiled-coil polypeptide with a selected	
XX epitope from solvent accessible region of a protein inserted into a	
XX coiled-coil polypeptide template. The coiled-coil polypeptides are useful	
XX for generating antibodies specific to a selected epitope from a selected	
XX protein and also for identifying ligands that selectively bind the alpha-	
XX helical segment contained in the native protein. The conformation	
XX specific antibodies are useful as therapeutic and diagnostic ligands	
XX	
SQ Sequence 14 AA;	
Query Match	100.0%; Score 86; DB 4; Length 14;

Best Local Similarity 100.0%; Pred. No. 1.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
Db 1 NDWEDRYRYENMYR 14

RESULT 2

ADD24281
ID ADD24281 standard; peptide; 15 AA.

ADD24281;

15-JAN-2004 (first entry)

Marine prion protein PrP peptide prpshort.

XX vaccine composition; virus-like particle; core particle;
XX first attachment site; antigen; antigenic determinant; prion protein;
XX PrP, PrP peptide; vaccine; neuroprotective; antiinflammatory;
XX prion disease; Bovine Spongiform Encephalopathy; BSE;
XX Creutzfeldt-Jakob Disease; prion.

XX prion.

XX WO2003059386-A2.

XX 24-JUL-2003.

XX 17-JAN-2003; 2003WO-EP000460.

XX 18-JAN-2002; 2002US-00050902.

XX 21-JAN-2002; 2002WO-IB000156.

XX 08-JUL-2002; 2002US-0393725P.

XX 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Fellisch E, Renner WA;

XX WPI, 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.
XX Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
XX phase) and at least one prion protein or peptide bound to the virus-like
XX particle.

XX Example 7; Page 102; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-
XX like or a core particle with at least one first attachment site and at
XX least one antigen or antigenic determinant that is a prion protein (PrP)
XX or its dimer, or a PrP peptide, the antigen or antigenic determinant
XX being bound to the virus-like or core particle. The vaccine of the
XX invention may have neuroprotective or antiinflammatory activity. The
XX composition is useful as a medicament or in manufacturing a medicament
XX for the treatment or prevention of prion diseases. The prion diseases may
XX include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
XX disease. The present sequence is that of a peptide fragment of a prion
XX protein which may be used for the production of the vaccine of the
XX invention.

XX Sequence 15 AA;

XX Query Match 100.0%; Score 86; DB 7; Length 15;

XX Best Local Similarity 100.0%; Pred. No. 1.4e-06;
XX Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
Db 2 NDWEDRYRYENMYR 15

RESULT 3
ABG80700
ID ABG80700 standard; protein; 16 AA.

AC ABG80700;

DT 29-NOV-2002 (first entry)

DE Prion protein peptide cprshort.

XX Molecular antigen array; vaccine; antigen; antimicrobial;
XX molecular scaffold; amyloid beta; Abeta 1-42; influenza;
XX graft versus host disease; TGF-mediated allergic reaction; anaphylaxis;
XX adult respiratory distress syndrome; ARDS; Crohn's disease;
XX allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
XX Grave's disease; systemic lupus erythematosus; osteoporosis;
XX inflammatory immune disease; myasthenia gravis; multiple sclerosis;
XX immunoproliferative disease lymphadenopathy; Alzheimer's disease;
XX angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
XX rheumatoid arthritis; diabetes; infectious disease; factor xa;
XX enterokinase; cysteine-containing linker.

XX Unidentified.

XX WO200256907-A2.

XX 25-JUL-2002.

XX 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0328988P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX (NOVS) NOVARTIS PHARMA AG.

XX (MAURER) MAURER P.

XX (LECH) LECHNER F.

XX (ORTM) ORTMANN R.

XX (LUBO) LUBOEND R.

XX (STAU) STAUFENBIEL M.

XX (FREY) FREY P.

XX Maurer P, Lechner F, Ortmann R, Luboend R, Staufenbiel M, Frey P;
XX Renner WA, Bachmann M, Tissot A, Seibel P, Piossek C;
XX WPI, 2002-636514/68.

XX Molecular antigen array used in the production of vaccines for infectious
XX diseases.

XX Example 8; Page 120; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
XX molecular scaffold comprising: (i) a core particle selected from: (1) a
XX core particle of a non-natural origin; and (2) a core particle of natural
XX origin; and (ii) an organiser comprising at least one first attachment
XX site, where the organiser is connected to the core particle by at least
XX one second attachment site, where the antigen or antigenic determinant is
XX amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
XX attachment site is selected from: (i) an attachment site not naturally
XX occurring with the antigen or antigenic determinant; and (ii) an
XX attachment site naturally occurring with the antigen or antigenic
XX determinant, where the second attachment site is capable of association
XX through at least one non-peptide bond to the first attachment site; and
XX where the antigen or antigenic determinant and the scaffold interact
XX through the association to form an ordered and repetitive antigen array.
XX Also included is a process for producing a non-naturally occurring
XX ordered and repetitive antigen array. The composition is used in
XX immunisation and as a vaccine for diseases such as influenza, graft

CC	versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
CC	respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
CC	acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
CC	systemic lupus erythematosus, inflammatory immune diseases, myasthenia
CC	gravis, immunoproliferative disease lymphadenopathy,
CC	angiolymphoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
CC	rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
CC	osteoporosis and infectious diseases. The present sequence is an antigen
CC	for use in the array of the invention. The antigen is modified to posses
CC	a cleavage site (gentoxinase or factor Xa) and a Cysteine- containing N-
CC	or C-terminal linker peptide which serves as the attachment point to a
CC	virus like particle or bacterial protein (the scaffold protein)
XX	
XX	Sequence 16 AA:
QY	Query Match 100.0%; Score 86; DB 5; Length 16;
db	Best Local Similarity 100.0%; Pred. No. 1.se-06;
	Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	1 NDMEDRYRYRNNMYR 14
	3 NDMEDRYRYRNNMYR 16

```

CC composition is useful as a medicament or in manufacturing a medicament
CC for the treatment or prevention of prion diseases. The prion diseases may
CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
CC Disease. The present sequence is that of a peptide fragment of a prion
CC protein which may be used for the production of the vaccine of the
CC invention.
XX
XX
SQ Sequence 16 AA;
Query Match 100.0%; Score 86; DB 7; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.5e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NDWEDRYRYENMYR 14
   |||||
Db 3 NDWEDRYRYENMYR 16

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XX RESULT 4
AC ADD24285
ID ADD24285 standard; peptide; 16 AA.
XX
AC ADD24285;
XX
DT 15-JAN-2004 (first entry)
XX
DE Murine prion protein PrP peptide cypshort.
XX
KW vaccine composition; virus-like particle; core particle;
KW first attachment site; antigen; antigenic determinant; prion protein;
KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
KW prion disease; Bovine Spongiform Encephalopathy; BSE;
KW Creutzfeldt-Jakob Disease; prion.
XX
OS Synthetic.
OS prion.
XX
PN WO2003059386-A2.
XX
PD 24-JUL-2003.
XX
PF 17-JAN-2003; 2003WO-EP000460.
XX
PR 18-JAN-2002; 2002US-00050902.
PR 21-JAN-2002; 2002WO-1B000166.
PR 08-JUL-2002; 2002US-0393725P.
PR 18-JUL-2002; 2002US-0396590P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
XX
DR WPI; 2003-598483/56.
XX
PT A vaccine composition for preventing or treating prion diseases (e.g.
PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
PT particle and at least one prion protein or peptide bound to the virus-like
PT particle.
XX
PS Example 14; Page 109; 246pp; English.
XX
XX This invention relates to a novel vaccine composition comprising a virus-
CC like or a core particle with at least one first attachment site and at
CC least one antigen or antigenic determinant that is a prion protein (PrP)
CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
CC being bound to the virus-like or core particle. The vaccine of the
CC invention may have neuroprotective or antiinflammatory activity. The

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DT 10-DEC-2002 (First entry)
XX
DE Murine prion protein (PrP) cyprinshort peptide.
XX
KW Human, mouse, rat; antimicrobial; antiallergic; immunomodulatory;
KW cytoskeletal; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease; prion.
XX
OS Mus sp.
XX
PM W02002565905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WO-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0286549P.
PR 05-OCT-2001; 2001US-0326598P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
PI Renner MA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
PI Proseck C;
XX
DR WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
XX
XX Example 8; Page 120; 441bp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide
CC (A β 1-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC attachment site and where the antigen or antigenic determinant and the
CC scaffold interact through the association to form an ordered and

CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Obeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have anticarcinogenic, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antibacterial, or hypoglycaemic activities and may be used in
 CC immunization and as a vaccine. The present sequence represents a peptide
 CC sequence used to create the compositions of the invention

XX Sequence 26 AA;

Query Match 100.0%; Score 86; DB 5; Length 26;
 Best Local Similarity 100.0%; Pred. No. 2.5e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
 Db 13 NDWEDRYRENMYR 26

RESULT 6

ID ABG80699 standard; protein; 26 AA.

XX ABG80699;

DT 29-NOV-2002 (first entry)

DE Prion protein peptide cprplong.

XX Molecular antigen array; vaccine; antigen; antimicrobial;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza;
 KW graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease; adult
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative disease lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.

XX Unidentified.

XX WO200256907-A2.

XX .25-JUL-2002.

XX 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326988P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX (NOVS) NOVARTIS PHARMA AG.

XX (MAUR) MAURER P.

XX (LECH) LECHNER F.

XX (ORTM) ORTMANN R.

XX (LUEO) LUEGEND R.

XX (STAU) STAUFENBIEL M.

XX (FREY) FREY P.

XX Maurer P, Lechner F, Ortman R, Luegend R, Staufenbiel M, Frey P;

XX Renner WA, Bachmann M, Tissot A, Seibel P, Plosek C;

XX WPI, 2002-636514/68.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (beta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is an antigen
 CC for use in the array of the invention. The antigen is modified to possess
 CC a cleavage site (enterokinase or factor Xa) and a Cysteine-containing N-
 CC or C-terminal linker peptide which serves as the attachment point to a
 CC virus like particle or bacterial protein (the scaffold protein)

SO Sequence 26 AA;

Query Match 100.0%; Score 86; DB 5; Length 26;
 Best Local Similarity 100.0%; Pred. No. 2.5e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
 Db 13 NDWEDRYRENMYR 26

RESULT 7
 ADD24284
 ID ADD24284 standard; peptide; 26 AA.

XX ADD24284;

XX 15-JAN-2004 (first entry)

XX Murine prion protein PrP peptide cprplong.

XX vaccine composition; virus-like particle; core particle;

XX first attachment site; antigen; antigenic determinant; prion protein;

XX PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;

XX prion disease; Bovine Spongiform Encephalopathy; BSE;

XX Creutzfeldt-Jakob Disease; prion.

XX Synthetic.

XX prion.

XX WO2003059386-A2.

XX 24-JUL-2003.

XX 17-JAN-2003; 2003WO-EP000460.

XX 18-JAN-2002; 2002US-00050902.

XX 21-JAN-2002; 2002WO-IB000168.

XX 08-JUL-2002; 2002US-0393725P.

XX 18-JUL-2002; 2002US-0396590P.

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA,
 XX
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g. RML-
 PT Creutzfeldt-Jakob Disease) comprising a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 14; Page 109; 246pp; English.
 XX
 CC The invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is that of a peptide fragment of a prion
 CC protein which may be used for the production of the vaccine of the
 CC invention.
 XX
 SQ Sequence 26 AA;
 XX
 Query Match 100.0%; Score 86; DB 7; Length 26;
 Best Local Similarity 100.0%; Pred. No. 2.5e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NDWEDRYRREMYR 14
 Db 13 NDWEDRYRREMYR 26
 XX
 RESULT 8
 ADE06768
 ID ADE06768 standard; peptide; 27 AA.
 XX
 AC ADE06768;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Mouse prion protein related peptide.
 XX
 KM hybrid polypeptide; protein aggregation; prion polypeptide;
 KM neuroprotective; nootropic; antidiabetic; anticonvulsant;
 KM cerebroprotective; antiparkinsonian; cytoskeletal; nephrotoxic; cardiac;
 KM antiinflammatory; antiarteriosclerotic; gene therapy;
 KM Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
 KM Alzheimer's disease; Type II diabetes; Huntington's disease;
 KM immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
 KM amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
 KM frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
 KM familial amyloidotic polyneuropathy; medullary carcinoma;
 KM chronic renal failure; congestive heart failure; chronic inflammation;
 KM atherosclerosis.
 XX
 OS Synthetic.
 OS Mus musculus.
 XX
 PN MO2003085086-A2.
 XX
 PD 16-OCT-2003.
 XX
 PE 08-APR-2003; 2003MO-US010856.
 XX
 PR 09-APR-2002; 2002US-0371610P.
 XX
 PA (SCRI) SCRIPPS RES INST.
 XX

PI Burton DR, Williamson RA, Moroncini G;
 XX
 DR WPI; 2003-877028/81.
 XX
 PT New motif-grafted hybrid polypeptides binding to the infectious form of a
 PT prion, useful for diagnosing or treating diseases of protein aggregation
 PT or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or
 PT diabetes.
 XX
 PS Example 2; Fig 1A; 115pp; English.
 XX
 CC The present invention describes a hybrid polypeptide (I) comprising: (a)
 CC a polypeptide motif containing a sufficient number of contiguous amino
 CC acid residues from a polypeptide associated with a disease of protein
 CC aggregation or conformation to bind an aggregating form of the
 CC polypeptide or to a disease-associate conformer of the polypeptide; and
 CC (b) an additional amino acids from a polypeptide other than the
 CC polypeptide from which the motif is derived, where the resulting hybrid
 CC polypeptide binds with greater affinity to a disease causing or
 CC infectious conformer of the polypeptide than is the source of the
 CC polypeptide motif compared to a benign form of the polypeptide. Also
 CC described: (1) a nucleic acid molecule encoding (1); (2) a vector
 CC comprising the nucleic acid molecule; (3) a cell comprising the vector;
 CC (4) detecting an isoform or a PrPSc form of a prion polypeptide or a
 CC polypeptide associated with a disease of protein aggregation, in a sample
 CC; (5) a solid support comprising a plurality of polypeptides described
 CC above; (6) detecting cells that contain a protein conformer associated
 CC with a disease of protein aggregation; (7) preparing a hybrid molecule
 CC that specifically interacts with one conformer of a protein involved in
 CC the disease mentioned above; and (8) an anti-idiotype antibody that
 CC specifically binds to an infectious form of a prion protein. (1) has
 CC neuroprotective, nootropic, antidiabetic, anticonvulsant,
 CC cerebroprotective, antiparkinsonian, cytoskeletal, nephrotoxic, cardiac,
 CC antiinflammatory and antiarteriosclerotic activities, and can be used in
 CC gene therapy. The composition and methods of the present invention can be
 CC used in diagnosing or treating diseases of protein aggregation or
 CC conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine
 CC spongiform encephalopathy, Alzheimer's disease, Type II diabetes,
 CC Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis
 CC associated with chronic inflammatory disease, hereditary systemic
 CC amyloidosis associated with autosomal dominant inheritance of variant
 CC transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,
 CC Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma
 CC cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma
 CC of thyroid, chronic renal failure, congestive heart failure, senile
 CC cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis
 CC or familial amyloidosis. The present sequence is used in the
 CC exemplification of the present invention.
 XX
 SQ Sequence 27 AA;
 XX
 Query Match 100.0%; Score 86; DB 7; Length 27;
 Best Local Similarity 100.0%; Pred. No. 2.6e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NDWEDRYRREMYR 14
 Db 10 NDWEDRYRREMYR 23
 XX
 RESULT 9
 AAB15057
 ID AAB15057 standard; peptide; 33 AA.
 XX
 AC AAB15057;
 XX
 DT 18-DEC-2000 (first entry)
 XX
 DE Mouse prion protein peptide homologous to ovine sequence 145-177.
 XX
 KM Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;
 KM transmissible spongiform encephalopathy; antibody;
 KM bovine spongiform encephalopathy; sheep; cattle; human.
 XX

XX Mus sp.
 OS WO200048003-A1.
 XX 17-AUG-2000.
 XX 09-FEB-2000; 2000WO-NL000079.
 XX 11-FEB-1999; 99EP-00200391.
 XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.
 XX Garsen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LTM;
 PI Schreuder BEC, Bosseers A;
 XX WPI; 2000-506099/45.
 XX Use of guanidine thiocyanate for reducing risk of false-positive results
 PT in testing mammalian sample for aberrant prion protein, useful for
 PT detection of transmissible spongiform encephalopathies.
 XX Disclosure; Fig 2; 49pp; English.
 XX The present invention relates to a method for reducing the risk of
 CC scoring a false positive test result in testing a sample for aberrant
 CC prion protein. The method involves the use of guanidine thiocyanate
 CC (gdnSCN) or its functional equivalent. This test is highly useful for
 CC testing for transmissible spongiform encephalopathies (TSEs) such as BSE
 CC (bovine spongiform encephalopathy). The method allows a faster, simpler
 CC and more reliable method for monitoring cattle and sheep for the presence
 CC of aberrant prion protein before it reaches the human and animal food
 CC chain. In the invention antipeptide antibodies were raised against sheep
 CC prion protein peptides. The present sequence is the mouse prion protein
 CC sequence homologous to the sheep peptide indicated
 XX Sequence 33 AA;
 SQ
 Query Match 100.0%; Score 86; DB 3; Length 33;
 Best Local Similarity 100.0%; Pred. No. 3.2e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NDWEDRYRNMNR 14
 Db 2 NDWEDRYRNMNR 15
 RESULT 10
 ADE06769 standard; peptide; 42 AA.
 XX ADE06769;
 XX 29-JAN-2004 (first entry)
 XX Mouse prion protein related peptide.
 XX hybrid polypeptide; protein aggregation; prion polypeptide;
 KM neuroprotective; neurotropic; antidiabetic; anticonvulsant;
 KM cerebroprotective; antiparkinsonian; cytoskeletal; nephrotoxic; cardiac;
 KM antiinflammatory; antiarteriosclerotic; gene therapy;
 KM Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
 KM Alzheimer's disease; Type II diabetes; Huntington's disease;
 KM immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
 KM amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
 KM frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
 KM familial amyloidotic polyneuropathy; medullary carcinoma;
 KM chronic renal failure; congestive heart failure; chronic inflammation;
 KM atherosclerosis.
 XX Synthetic.
 OS Mus musculus.
 XX

PN WO2003085086-A2.
 XX 16-OCT-2003.
 XX 08-APR-2003; 2003WO-US010856.
 XX 09-APR-2002; 2002US-0371610P.
 XX (SCRI) SCRIPPS RES INST.
 XX Burton DR, Williamson RA, Moroncini G;
 XX WPI; 2003-677026/81.
 XX New motif-grafted hybrid polypeptides binding to the infectious form of a
 PT prion, useful for diagnosing or treating diseases of protein aggregation
 PT or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or
 PT diabetes.
 XX Example 2; Fig 1A; 115pp; English.
 XX The present invention describes a hybrid polypeptide (I) comprising: (a)
 CC a polypeptide motif containing a sufficient number of contiguous amino
 CC acid residues from a polypeptide associated with a disease of protein
 CC aggregation or conformation to bind an aggregating form of the
 CC polypeptide or to a disease-associate conformer of the polypeptide; and
 CC (b) an additional amino acids from a polypeptide other than the
 CC polypeptide from which the motif is derived, where the resulting hybrid
 CC polypeptide binds with greater affinity to a disease causing or
 CC infectious conformer of the polypeptide than is the source of the
 CC polypeptide motif compared to a benign form of the polypeptide. Also
 CC described: (1) a nucleic acid molecule encoding (1); (2) a vector
 CC comprising the nucleic acid molecule; (3) a cell comprising the vector;
 CC (4) detecting an isoform or a PrSc form of a prion polypeptide or a
 CC polypeptide associated with a disease of protein aggregation, in a sample
 CC above; (5) a solid support comprising a plurality of polypeptides described
 CC with a disease of protein aggregation; (7) preparing a hybrid molecule
 CC that specifically interacts with one conformer of a protein involved in
 CC the disease mentioned above; and (8) an anti-idiotypic antibody that
 CC specifically binds to an infectious form of a prion protein. (1) has
 CC neuroprotective, neurotropic, antidiabetic, anticonvulsant,
 CC cerebroprotective, antiparkinsonian, cytoskeletal, nephrotoxic, cardiac,
 CC antiinflammatory and antiarteriosclerotic activities, and can be used in
 CC gene therapy. The composition and methods of the present invention can be
 CC used in diagnosing or treating diseases of protein aggregation or
 CC conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine
 CC spongiform encephalopathy, Alzheimer's disease, Type II diabetes,
 CC Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis
 CC associated with chronic inflammatory disease, hereditary systemic
 CC amyloidosis associated with autosomal dominant inheritance of variant
 CC transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,
 CC Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma
 CC cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma
 CC of thyroid, chronic renal failure, congestive heart failure, senile
 CC cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis
 CC or familial amyloidosis. The present sequence is used in the
 CC exemplification of the present invention.
 XX Sequence 42 AA;
 SQ
 Query Match 100.0%; Score 86; DB 7; Length 42;
 Best Local Similarity 100.0%; Pred. No. 4.1e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NDWEDRYRNMNR 14
 Db 25 NDWEDRYRNMNR 38
 RESULT 11
 ABG94340 standard; protein; 124 AA.
 ID

XX ABG94340;
 AC 10-DEC-2002 (first entry)
 XX
 XX Mouse mPrP^{sc} protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KW cytoskeletal; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KW vaccine; infectious disease.
 XX
 XX Mus sp.
 XX WO200256905-A2.
 XX
 XX 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000166.
 XX
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326989P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Renner W., Bachmann M., Tissot A., Maurer P., Lechner F., Sebbel P;
 PI Ploessek C;
 XX WPI; 2002-627351/67.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 438; 441pp; English.
 XX
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SO Sequence 124 AA;
 Query Match 100.0%; Score 86; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1,3e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NDWEDRYRENMYR 14
 |||||
 Db 23 NDWEDRYRENMYR 36

ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 XX 29-NOV-2002 (first entry)
 DT
 XX Mouse truncated prion protein with C terminal cysteine containing linker.
 DE
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; A β 1-42; influenza; murein;
 KW graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX
 XX Mus sp.
 OS Synthetic.
 OS
 XX WO200256907-A2.
 XX
 XX 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000168.
 XX
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326989P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUEB/) LUEBEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX
 PI Maurer P., Lechner F., Ortmann R., Luebend R., Staufenbiel M., Frey P;
 PI Renner W., Bachmann M., Tissot A., Sebbel P., Ploessek C;
 XX WPI; 2002-636514/68.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7; Page 415; 418pp; English.
 XX
 XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1i) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (A β 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1i) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult

CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, mastocytosis
 CC graves, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

CC Sequence 124 AA;

Query Match Best Local Similarity 100.0%; Score 86; DB 5; Length 124;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYRENMYR 14
 |||||
 Db 23 NDWEDRYRYRENMYR 36

RESULT 13
 ADD24200 ID ADD24200 standard; protein; 124 AA.

AC ADD24200;

DT 15-JAN-2004 (first entry)

DE mPrP-EK-Fc* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;

KM first attachment site; antigen; antigenic determinant; prion protein;

KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;

KM prion disease; Bovine Spongiform Encephalopathy; BSE;

KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.

XX unidentified.

OS prion.

XX WO2003059386-A2.

PN 24-JUL-2003.

PD 17-JAN-2003; 2003WO-EP000460.

XX 18-JAN-2002; 2002US-000509302.

PR 21-JAN-2002; 2002WO-IB000166.

PR 08-JUL-2002; 2002US-0393725P.

PR 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pellizzoli E, Renner WA;

XX WPI, 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.

XX Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

XX phage) and at least one prion protein or peptide bound to the virus-like

XX particle.

XX Example 13; SEQ ID NO 93; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-

CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)
 CC which was used during the exemplification of the invention.

CC Sequence 124 AA;

Query Match Best Local Similarity 100.0%; Score 86; DB 7; Length 124;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYRENMYR 14
 |||||
 Db 23 NDWEDRYRYRENMYR 36

RESULT 14
 AAB07316 ID AAB07316 standard; protein; 208 AA.

AC AAB07316;

DT 17-OCT-2000 (first entry)

DE Mouse prion protein sequence.

KM Mouse; prion protein; transmissible spongiform encephalopathy;

KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX Mus sp.

XX Key

XX Region

XX Disulfide-bond

XX Modified-site

XX /note= "C-terminal phospho-inositol glycolipid membrane

XX anchor (-GPI)"

XX WO200029850-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99WO-FI000897.

XX 17-NOV-1998; 98FI-00002481.

XX (WALL-) WALLAC OY.

XX (BBSR-) BBSRC OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPI, 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of

XX transmissible spongiform encephalopathies in bovines.

XX Disclosure; Page 41-42; 50pp; English.

XX The present sequence is the mouse prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

XX of this protein in body fluid or tissue samples may be measured by an assay

XX antibody, which is then detected. The presence of PrP indicates TSE. PrP

XX epitopes (AAB07320-B07326) are derived from the protease resistant core

XX of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;
SQ

Query Match 100.0%; Score 86; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
DB 120 NDWEDRYRYENMYR 133

RESULT 15

AAB07327 ID AAB07327 standard; protein; 208 AA.

AC AAB07327;

DT 17-OCT-2000 (first entry)

DE Mouse prion protein sequence.

KM Mouse; prion protein; transmissible spongiform encephalopathy;

KM bovine spongiform encephalopathy; TSE diagnosis; PrP.

OS Mus sp.

Key Location/Qualifiers

FT Region 37..68

FT /note="Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"

FT Disulfide-bond 156..191

FT Modified-site 208

FT /note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

PN W0200029849-A1.

PD 25-MAY-2000.

PF 27-OCT-1999; 99WO-F1000896.

PR 17-NOV-1998; 98PI-00002480.

PA (WALL-) WALLAC OY.

PI (BBSR-) BBSRC OFFICE.

PI Hope J, Barnard GJR, Birkett CR;

PI WPI; 2000-399778/34.

PT New immunosay for prion protein, used for determination of

PT transmissible spongiform encephalopathies in mammals, comprises specific

PT capture antibody.

PS Disclosure; Page 41-42; 50pp; English.

XX The present sequence is the mouse prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated.

XX Insoluble isoform is implicated in the pathogenesis of transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of

XX this protein in body fluid or tissue samples may be measured by an assay

XX of the present invention, in which a PrP epitope is captured by an

XX antibody, which is then detected. The presence of PrP indicates TSE. PrP

XX epitopes (AAB07320-B07326) are derived from the protease resistant core

XX of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
DB 120 NDWEDRYRYENMYR 133

Search completed: April 30, 2004, 15:28:53
Job time : 44 secs

Query Match 100.0%; Score 86; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 9.58333 Seconds
(without alignments) 108.668 Million cell updates/sec

Title: US-09-603-832-7
Sequence: 1 ETDVKMERVYEQMCTQYQ 20

Scoring table: BIOSUM62
Gapop 10.0, Gapext 0.5

Searched: 141681 seqs, 52070155 residues
Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: SwissProt_42:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	103	100.0	254	1	PRIO_CRIGR
2	103	100.0	254	1	PRIO_CRIMI
3	103	100.0	254	1	PRIO_MOUSE
4	103	100.0	254	1	PRIO_RAT
5	103	100.0	254	1	PRIO_SIGHI
6	102	99.0	238	1	PRIO_TGHEG
7	102	99.0	255	1	PRIO_CAMDR
8	101	98.1	255	1	PRIO_CANPA
9	101	98.1	256	1	PRIO_CEREL
10	101	98.1	256	1	PRIO_ODOHE
11	101	98.1	256	1	PRP2_BOVIN
12	101	98.1	256	1	PRP2_TRAST
13	101	98.1	256	1	PRIO_BOVIN
14	101	98.1	254	1	PRP1_TRAST
15	99	96.1	232	1	PRIO_ATRGE
16	99	96.1	238	1	PRIO_CERYT
17	99	96.1	241	1	PRIO_CALMO
18	99	96.1	241	1	PRIO_MANSP
19	99	96.1	245	1	PRIO_CERAE
20	99	96.1	246	1	PRIO_CERMO
21	99	96.1	246	1	PRIO_CERPA
22	99	96.1	246	1	PRIO_CERPA
23	99	96.1	252	1	PRIO_CERPA
24	99	96.1	252	1	PRIO_CERPA
25	99	96.1	252	1	PRIO_CERPA
26	99	96.1	253	1	PRIO_CERPA
27	99	96.1	253	1	PRIO_CERPA
28	99	96.1	253	1	PRIO_CERPA
29	99	96.1	253	1	PRIO_CERPA
30	99	96.1	253	1	PRIO_CERPA
31	99	96.1	253	1	PRIO_CERPA
32	99	96.1	253	1	PRIO_CERPA
33	99	96.1	260	1	PRIO_SATISC

34	98	95.1	257	1	PRIO_PIG
35	97	94.2	252	1	PRIO_RABIT
36	97	94.2	256	1	PRIO_CAPI
37	97	94.2	256	1	PRIO_SHEEP
38	97	94.2	259	1	PRIO_TRIYU
39	96	93.2	256	1	PRIO_FELCA
40	96	93.2	257	1	PRIO_MUSPF
41	96	93.2	257	1	PRIO_MUSVT
42	95	92.2	239	1	PRIO_AOTTR
43	94	91.3	254	1	PRIO_MESAU
44	90	48.5	273	1	PRIO_CHICK
45	46	44.7	2241	1	TGEGU_HCWVA

ALIGNMENTS

RESULT 1	PRIO_CRIGR	STANDARD	PRT	254 AA
AC	060506			
DT	15-JUL-1998 (Rel. 36, Created)			
DT	15-JUL-1998 (Rel. 36, Last sequence update)			
DT	15-MAR-2004 (Rel. 43, Last annotation update)			
DE	Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).			
GN	PRNP.			
OS	Cricetulus griseus (Chinese hamster)			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;			
OC	Cricetulus.			
OX	NCBI_Taxid=10029;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RX	TISSUE=Brain;			
RX	MEDLINE=90158578; PubMed=2406562;			
RA	Lowenstein D.H., Butler D.A., McKinley M.P.,			
RA	DeArmond S.J., Prusiner S.B.;			
RT	"Three hamster species with different scrapie incubation times and			
RT	neuropathological features encode distinct prion proteins.";			
RL	Mol. Cell. Biol. 10:1153-1163(1990).			
CC	- FUNCTION: The function of Prp is not known. Prp is encoded in the			
CC	host genome and is expressed both in normal and infected cells.			
CC	- SUBUNIT: Prp has a tendency to aggregate yielding polymers called			
CC	"rods".			
CC	- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.			
CC	- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS			
CC	INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS Kuru,			
CC	CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME			
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),			
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.			
CC	- SIMILARITY: Belongs to the prion family.			
CC	-----			
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration			
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CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/			
CC	or send an email to license@sib-sib.ch).			
DR	EMBL, M33958; AAA37013.1; -			
DR	PIR, A34759; A34759.			
DR	HSSP, P04925; 1AG2.			
DR	InterPro, IPR000817; Prion.			
DR	PIfam, PF00377; prion.1.			
DR	PIfam, PF03991; Prion octapep; 6.			
DR	PRINTS, PR00341; PRION.			
DR	SMART, SM00157; prp.1.			
DR	PROSITE, PS00291; PRION_1; 1.			
DR	PROSITE, PS00706; PRION_2; 1.			
KW	Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.			
FT	SIGNAL 1 22			
FT	CHAIN 23 231			
FT	MAJOR PRION PROTEIN.			

FT PROPEP 232 254 REMOVED IN MATURE FORM.
 FT LIPID 231 231 GPI-anchor amidated serine.
 FT DOMAIN 90 231 PRP27-30 (PROTEASE RESISTANT CORE).
 FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (BY SIMILARITY).
 FT CARBOHYD 197 197 N-LINKED (GLCNAC. . .) (BY SIMILARITY).
 FT DISULFID 179 197 BY SIMILARITY.
 FT DOMAIN 51 91 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
 FT REPEAT 51 59 0.
 FT REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 FT REPEAT 76 83 3.
 FT REPEAT 84 91 4.
 FT REPEAT 84 91 5.
 SQ SEQUENCE 254 AA; 27823 MW; 5.6299CA000E8B607D CRC64;
 Query Match 100.0%; Score 103; DB 1; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1.5e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVGMERVVEQMCVTOYO 20
 DB 200 ETDVGMERVVEQMCVTOYO 219
 RESULT 2
 P-PRIO CRIMI STANDARD; PRT; 254 AA.
 ID AC 060468;
 DT 15-JUL-1998 (Rel. 36, Created)
 DT 15-JUL-1998 (Rel. 36, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN PRNP.
 OS Cricetus migratorius (Armenian hamster).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
 OC Cricetulus.
 NCBI_TaxID=10032;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=90158578; PubMed=2406562;
 RA Lowenstein D.H., Butler D.A., Westaway D., McKinley M.P.,
 RA DeArmond S.J., Prusiner S.B.;
 RT "Three hamster species with different scrapie incubation times and
 RT neuropathological features encode distinct prion proteins.";
 RL Mol. Cell. Biol. 10:1153-1163(1990).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: M33959; AAA37014.1; -;
 DR HSSP: P04925; IAG2
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion; 1.
 DR PRINTS: PR00341; PRION.

DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 FT SIGNAL 1 22 BY SIMILARITY.
 FT CHAIN 23 231 MAJOR PRION PROTEIN.
 FT PROPEP 232 254 REMOVED IN MATURE FORM.
 FT LIPID 231 231 GPI-anchor amidated serine.
 FT DOMAIN 90 231 PRP27-30 (PROTEASE RESISTANT CORE).
 FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (BY SIMILARITY).
 FT CARBOHYD 197 197 N-LINKED (GLCNAC. . .) (BY SIMILARITY).
 FT DISULFID 179 214 BY SIMILARITY.
 FT DOMAIN 51 91 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
 FT REPEAT 51 59 0.
 FT REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 FT REPEAT 76 83 3.
 FT REPEAT 84 91 4.
 FT REPEAT 84 91 5.
 SQ SEQUENCE 254 AA; 27855 MW; 7B963FC6F779D0F CRC64;
 Query Match 100.0%; Score 103; DB 1; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1.5e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVGMERVVEQMCVTOYO 20
 DB 200 ETDVGMERVVEQMCVTOYO 219
 RESULT 3
 P-PRIO MOUSE STANDARD; PRT; 254 AA.
 ID AC P04925;
 DT 13-AUG-1987 (Rel. 05, Created)
 DT 01-JAN-1990 (Rel. 13, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN PRNP OR PRN-P.
 GN Mus musculus (Mouse).
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=NZW, and I/LNW;
 RX MEDLINE=86052869; PubMed=2890436;
 RA Westaway D., Goodman P.A., Miranda C.A., McKinley M.P., Carlson G.A.,
 RA Prusiner S.B.;
 RT "Distinct prion proteins in short and long scrapie incubation period
 RT mice.";
 RL Cell 51:651-662(1987).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=8613583; PubMed=3462700;
 RA Locat C., Chesebro B., Race R., Keith J.M.;
 RT "Molecular cloning and complete sequence of prion protein cDNA from
 RT mouse brain infected with the scrapie agent.";
 RL Proc. Natl. Acad. Sci. U.S.A. 83:6372-6376(1986).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=8816695; PubMed=2894984;
 RA Hope J., Multhaup G., Reekie L.J.D., Kimberlin R.H., Beyreuther K.;
 RT "Molecular pathology of scrapie-associated fibril protein (Prp) in
 RT mouse brain affected by the M87 strain of scrapie.";
 RL Eur. J. Biochem. 172:271-277(1988).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=NZW; TISSUE=Brain;
 RX MEDLINE=99018115; PubMed=9799790;
 RA Lee I.Y., Westaway D., Smit A.F.A., Wang K., Seto J., Chen L.,
 RA Acharya C., Ankener M., Baekin D., Cooper C., Yao H., Prusiner S.B.,
 RA Hood L.E.;

"Complete genomic sequence and analysis of the prion protein gene region from three mammalian species."

RT Genome Res. 8:1022-1037(1998).

RN [5]

RP SEQUENCE FROM N.A.

RX MEDLINE=22388257; PubMed=12477932;

RA Klausner R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhut N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusik K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Ueda T.B., Toshiyuki S., Carinici P., Prange C.,

RA Raha S.S., Loguclano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.O., Hulyk S.W.,

RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Fahy J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalins D.E.,

RA Schnerch A., Schein J.E., Jones S.J.W., Maiza U.A.,

RT "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences."

RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

RN [6]

RP SEQUENCE OF 87-164 FROM N.A.

RX MEDLINE=86213844; PubMed=3923361.

RA Chesebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,

RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.,

RT "Identification of scrapie prion protein-specific mRNA in scrapie-infected and uninfected brain."

RT Nature 315:331-333(1985).

RL [7]

RN STRUCTURE BY NMR OF 120-230.

RX MEDLINE=96317593; PubMed=8700211;

RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R., Wuthrich K.;

RT "NMR structure of the mouse prion protein domain PrP(121-321)."

RT Nature 382:180-182(1996).

RL [8]

RN STRUCTURE BY NMR OF 23-231.

RX MEDLINE=97424376; PubMed=9280298;

RA Riek R., Hornemann S., Wider G., Glockshuber R., Wuthrich K.;

RT "NMR characterization of the full-length recombinant murine prion protein, mPrP(23-231)."

RT FEBS Lett. 413:282-288(1997).

RL [9]

RN HYDROXYLATION OF PRO-44.

RX MEDLINE=20490364; PubMed=11032800;

RA Gall A.C., Ritchie M.A., Hunt L.G., Steane S.E., Davies K.G., Bocking S.P., Rile A.G.O., Bennett A.D., Hope J.;

RT "Post-translational hydroxylation at the N-terminus of the prion protein reveals presence of PrP structure in vivo."

RT EMBO J. 19:5324-5331(2000).

RL [10]

RN FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.

CC -1 SUBUNIT: PrP has a tendency to aggregate yielding polymers called "colds".

CC -1 SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1 DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CREATININELT-JAKOB DISEASE (CJD), GERSTMAN-STAUSSELER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1 SIMILARITY: Belongs to the prion family.

CC -----

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CC -----

DR EMBL: M18070; AAA3997.1; -

DR EMBL: M18071; AAA3998.1; -

DR EMBL: M1865; AAA3999.1; -

DR EMBL: U29186; AAC02804.1; -

DR EMBL: BC006703; AAH06703.1; -

DR EMBL: M30384; AAA3999.1; -

DR PIR: A29669; A23544.

DR PDB: 1AG2; 08-OCT-97.

DR MGD: MGI:97769; Prnp.

DR GO: GO:0005783; C:Endoplasmic reticulum; IDA.

DR GO: GO:0005794; C:Golgi apparatus; IDA.

DR GO: GO:0005886; C:Plasma membrane; IDA.

DR GO: GO:0005507; F:copper ion binding; IDA.

DR GO: GO:0006979; P:response to oxidative stress; IDA.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; prion; 1.

DR Pfam: PF03991; Prion octapep; 6.

DR PRINTS: PR00341; PRION.

DR SMART: SM00157; PRP; 1.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Hydroxylation; Polymorphism; 3D-structure; Lipoprotein.

FT SIGNAL 1 22

FT CHAIN 23 230

FT PROPEP 231 254

FT MOD_RES 44 44

FT LIPID 230 230

FT CARBOHYD 180 180

FT CARBOHYD 196 196

FT DISULFID 178 213

FT DOMAIN 51 90

FT REPEAT 51 58

FT REPEAT 59 66

FT REPEAT 67 74

FT REPEAT 75 82

FT REPEAT 83 90

FT REPEAT 108 108

FT VARIANT 189 189

FT CONFLICT 133 133

FT TURN 124 126

FT STRAND 128 129

FT HELIX 143 152

FT TURN 153 155

FT STRAND 161 162

FT HELIX 171 191

FT TURN 192 194

FT HELIX 198 221

FT TURN 222 224

SO SEQUENCE 254 AA; 27977 MW; D5331E6321826CCO CRC64;

Query Match 100.0%; Score 103; DB 1; Length 254;

Best local Similarity 100.0%; Pred. No. 1.5e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVAMERVVVEQKCTVOYQ 20

DB 199 ETDVAMERVVVEQKCTVOYQ 218

RESULT 4

PRO RAT

ID PRO RAT

AC P13852; STANDARD; PRT; 254 AA.

DT 01-JAN-1990 (Rel. 13; Created)

DT 01-NOV-1997 (Rel. 35; Last sequence update)

DT 15-MAR-2004 (Rel. 43; Last annotation update)

DE	Major prion protein precursor (PrP).
GN	PRNP OR PEN.
OC	Rattus norvegicus (Rat).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrate; Euteleostomi;
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Rattus.
OX	NCBI_TaxID=10116;
RN	[1]
RP	SEQUENCE FROM N.A.
RC	STRAIN=Zitter, and SJ/D; TISSUE=Liver;
RX	MEDLINE=9703369; PubMed=8879116;
RA	Sasaki K., Matsumoto Y., Hirota Y., Matsumoto Y., Onodera T.;
RT	"Three-exon structure of the gene encoding the rat prion protein and its expression in tissues." ;
RT	Virus Genes 12:15-20(1996).
RL	[3]
RN	SEQUENCE OF 29-254 FROM N.A.
RP	MEDLINE=88037055; PubMed=2889848;
RX	Liao Y.-C., Tokeas Z., Lim E., Lackey A., Woo C.H., Button J.D.,
RA	Clawson G.A.;
CC	"Cloning of rat 'prion-related protein' cDNA." ;
CC	Lab. Invest. 57:370-374(1987).
CC	-1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC	-1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "rods".
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC	-1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS Kuru, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC	-1- SIMILARITY: Belongs to the prion family.
CC	-----
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CC	-----
DR	EMBL; S69654; AA30728.2; -
DR	EMBL; D50093; BA408790.1; -
DR	EMBL; M20313; AAA41947.1; -
DR	PIR; A53892; A53892.
DR	HSSP; P04925; IAG2.
CC	InterPro: IPR000817; Prion.
DR	Pfam; PF003377; prion.1
DR	Pfam; PF03991; Prion_octapep; 6.
DR	PRINTS; PRO0341; PRION.
DR	SMART; SM00157; PRP; 1.
DR	PROSITE; PS00291; PRION_1; 1.
DR	PROSITE; PS00706; PRION_2; 1.
KW	Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
FT	SIGNAL
FT	CHAIN
FT	PROPEP
FT	LIPID
FT	CARBOHYD
FT	CARBOHYD
FT	DISULFID
FT	DOMAIN
FT	DNA
FT	RNA
FT	TE
FT	TM
FT	TO
FT	TU
FT	TV
FT	TX
FT	TY
FT	TZ
FT	UN
FT	UP
FT	UR
FT	US
FT	UT
FT	UU
FT	UV
FT	UX
FT	UY
FT	UZ
FT	VA
FT	VB
FT	VC
FT	VD
FT	VE
FT	VF
FT	VG
FT	VH
FT	VI
FT	VJ
FT	VK
FT	VL
FT	VM
FT	VN
FT	VO
FT	VP
FT	VQ
FT	VR
FT	VS
FT	VT
FT	VU
FT	VV
FT	UV
FT	UX
FT	UY
FT	UZ
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FT	VG
FT	VH
FT	VI
FT	VJ
FT	VK
FT	VL
FT	VM
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FT	VO
FT	VP
FT	VQ
FT	VR
FT	VS
FT	VT
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FT	VV
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FT	UZ
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FT	VG
FT	VH
FT	VI
FT	VJ
FT	VK
FT	VL
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FT	VN
FT	VO
FT	VP
FT	VQ
FT	VR
FT	VS
FT	VT
FT	VU
FT	VV
FT	UV
FT	UX
FT	UY
FT	UZ
FT	VA
FT	VB
FT	VC
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FT	VE
FT	VF
FT	VG
FT	VH
FT	VI
FT	VJ
FT	VK
FT	VL
FT	VM
FT	VN
FT	VO
FT	VP
FT	VQ
FT	VR
FT	VS
FT	VT
FT	VU
FT	VV
FT	UV
FT	UX
FT	UY
FT	UZ
FT	VA
FT	VB
FT	VC
FT	VD
FT	VE
FT	VF
FT	VG
FT	VH
FT	VI
FT	VJ
FT	VK
FT	VL
FT	VM
FT	VN
FT	VO
FT	VP
FT	VQ
FT	VR
FT	VS
FT	VT
FT	VU
FT	

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FT REPEAT 51 59 1.
FT REPEAT 67 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
FT REPEAT 84 91 5.
SQ SEQUENCE 254 AA; 27804 MW; 28FA42AD13BEFA2C6 CRC64;

Query March 100.0%; Score 103; DB 1; Length 254;
Best local similarity 100.0%; Pred. NO. 1.5e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ETDYKMERVEQCWCVTQYQ 20
        |||
Db       200 ETDYKMERVEQCWCVTQYQ 219

RESULT 5
PRIO_SIGHI STANDARD; PRP; 254 AA.
AC Q9Z0T3;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP).
GN PrNP OR PrP.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
ON [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; Pubmed=10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
   Schwarz T.F., Werner T., Schatzl H.M.; von Brunn A., Gilch S.,
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
   of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999)."
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
   host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
   "rodns".
CC -1- STRUCTURAL LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
   ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KURU,
   CRETZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
   (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
   TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; AF117325; AADI9996.1; .
DR HSBP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00337; Prion; 1
DR Pfam; PF03991; Prionoctapep; 6.
DR PRINTS; PRO0341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 22 BY SIMILARITY
FT CHAIN 23 254 MAJOR PRION PROTEIN.
FT DOMAIN 51 91 5 X 8 AA TANDEN REPEATS OF P-H-G-G-G-W-G-
Q.

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FT REPEAT 51 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
FT REPEAT 84 91 5.
FT DISULFID 179 214 BY SIMILARITY.
FT CARBOHYD 181 181 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 197 197 N-LINKED (GLCNAC. .) (POTENTIAL).
SQ SEQUENCE 254 AA; 27874 MW; 50C464D5165572DF CRC64;

Query Match 100.0%; Score 103; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.5e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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FT DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 76 76 4.
FT NON TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match 99.0%; Score 102; DB 1; Length 238;
Best Local Similarity 95.0%; Pred. No. 2e-09;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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RESULT 6
PRIO_THESG STANDARD; PRT; 238 AA.
ID PRIO_THESG
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP OR PrP.
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_Taxid=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES Kuru,
CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U75383; AAB50630.1; -
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 15 BY SIMILARITY.
FT CHAIN 16 MAJOR PRION PROTEIN.
FT DISULFID 164 199 BY SIMILARITY.
FT CARBOHYD 166 166 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 182 182 N-LINKED (GLCNAC. .) (POTENTIAL).

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RESULT 7
PRIO_CAMDR STANDARD; PRT; 255 AA.
ID PRIO_CAMDR
AC P79141;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP).
GN PRNP OR PrP.
OS Camelus dromedarius (Dromedary) (Arabian camel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.
OX NCBI_Taxid=9688;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=96019099; PubMed=9358067;
RA Kaluz S., Kaluzova M., Flint A.P.F.;
RL "Sequencing analysis of prion genes from red deer and camel.";
RL Gene 199:283-286(1997).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES Kuru,
CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; Y09760; CAA70901.1; -
DR HSSP; P10279; IDMY.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 24 BY SIMILARITY.
FT CHAIN 25 255 MAJOR PRION PROTEIN.
FT CHAIN 54 94 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 54 62 Q.
FT REPEAT 63 70 1.
FT REPEAT 63 70 2.

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FT REPEAT 71 78 3.
FT REPEAT 79 86 4.
FT REPEAT 87 94 5.
FT DISULFID 182 217 BY SIMILARITY.
FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 255 AA; 27595 MW; FABB2BFA333E494 CRC64;

Query Match
Best Local Similarity 99.0%; Score 102; DB 1; Length 255;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVQMERVVEQMCITQYQ 20
Db 203 ETDVQMERVVEQMCITQYQ 222

RESULT 8
PRIO CANFA STANDARD; PRT; 255 AA.
AC O46501;
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp).
GN PRNP OR PRP.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RA Rohwer R.G., Edelman D.;
RT Submitted (SEP-1997) to the EMBL/Genbank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CID), GERSTMAN-STAUSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: AF022714; AAB94585.1;
DR HSSP: P10279; IDWY.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; prion.1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR SMART: SMC0157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 24
FT CHAIN 25 255 MAJOR PRION PROTEIN.
FT DOMAIN 54 94 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 54 62 1.
FT REPEAT 63 70 2.
FT REPEAT 71 78 3.
FT REPEAT 79 86 4.
FT REPEAT 87 94 5.

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FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 199 199 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DISULFID 182 216 BY SIMILARITY.
SQ SEQUENCE 255 AA; 27704 MW; 70E8041BD6B1F63 CRC64;

Query Match
Best Local Similarity 98.1%; Score 101; DB 1; Length 255;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVQMERVVEQMCITQYQ 20
Db 202 ETDVQMERVVEQMCITQYQ 221

RESULT 9
PRIO CEREL STANDARD; PRT; 256 AA.
AC P79142; O62669;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp).
GN PRNP OR PRP.
OS Cervus elaphus (Red deer), and
OS Cervus elaphus nelsoni (American elk).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;
OC Cervidae; Cervinae; Cervus.
OX NCBI_TaxID=9860; 9864;
RN [1]
RP SEQUENCE FROM N.A.
RA SPECIES=C. elaphus; TISSUE=Blood;
RX MEDLINE=98019099; PubMed=9358067;
RA Kaluz S., Kaluzova M., Flint A.P.F.;
RT "Sequencing analysis of prion genes from red deer and camel.";
RL Gene 199:281-286 (1997).
RN [2]
RP SEQUENCE FROM N.A.
RA SPECIES=C. nelsoni; TISSUE=Brain;
RX MEDLINE=98281723; PubMed=9620413;
RA O'Rourke K.I., Baszler T.V., Miller J.M., Spraker T.R.,
RA Sadler-Rigsbyman I., Knowles D.P.;
RT "Monoclonal antibody F89/160.1.5 defines a conserved epitope on the
RT ruminant prion protein.";
RL J. Clin. Microbiol. 36:1750-1755 (1998).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CID), GERSTMAN-STAUSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: Y09761; CAAT0902.1;
DR EMBL: AF016227; AAC12860.2;
DR HSSP: P10279; IDWY.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; prion.1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.

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DR SMART: SM00157; PRP: 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 24 BY SIMILARITY.
FT CHAIN 25 256 MAJOR PRION PROTEIN.
FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DISULFID 182 217 BY SIMILARITY.
FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 54 62 Q.
FT REPEAT 63 70 1.
FT REPEAT 71 78 2.
FT REPEAT 79 86 3.
FT REPEAT 87 95 4.
SQ SEQUENCE 256 AA; 27935 MW; E54EB121DE02E1B5 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;
Best Local Similarity 90.0%; Pred. No. 3.1e-09;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQNCVTQYQ 20
DB 203 ETDIKMERVVEQNCVTQYQ 222

RESULT 10
PRIO_ODOHE STANDARD; PRT; 256 AA.
AC P47852;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP).
GN PRNP
OS Odocoileus hemionus (Mule deer) (Black-tailed deer).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;
OC Cervidae; Odocoileinae; Odocoileus.
CX NCBI_TaxID=98872;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97393774; PubMed=9250209;
RA Cervenakova L., Rohwer R., Williams S., Brown P., Gajdusek D.C.;
RT "High sequence homology of the PrP gene in mule deer and Rocky
Mountain elk.";
RL Lancet 350:219-220(1997).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor (by
CC similarity).
CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF ANIMALS INFECTED
CC WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KNOWN AS CHRONIC
CC WASTING DISEASE (CMD).
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U25965; AAA68941.1; -.
CC HSSP: P10279; IDWY.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion_1.
DR Pfam: PF03991; Prion_octapep; 5.
DR PRINTS: PR00341; PRION.

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DR SMART: SM00157; PRP: 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 24 BY SIMILARITY.
FT CHAIN 25 256 MAJOR PRION PROTEIN.
FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DISULFID 182 217 BY SIMILARITY.
FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 54 62 Q.
FT REPEAT 63 70 1.
FT REPEAT 71 78 2.
FT REPEAT 79 86 3.
FT REPEAT 87 95 4.
SQ SEQUENCE 256 AA; 27961 MW; E98EB121C302FD36 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;
Best Local Similarity 90.0%; Pred. No. 3.1e-09;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQNCVTQYQ 20
DB 203 ETDIKMERVVEQNCVTQYQ 222

RESULT 11
PRP2_BOVIN STANDARD; PRT; 256 AA.
AC Q01880;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein 2 precursor (PrP) (Major scrapie-associated fibril
protein 2).
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidae;
OC Bovidae; Bovinae; Bos.
CX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE=Brain;
RX MEDLINE=93118243; PubMed=1362024;
RA Yoshimoto J., Iinuma T., Ishiguro N., Horuchi M., Imamura M.,
RA Shitagawa M.;
RT "Comparative sequence analysis and expression of bovine PrP gene in
mouse I-929 cells.";
RL Virus Genes 6:343-356(1992).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL: D10614; BAA01469.1; -.
CC HSSP: P10279; IDWY.
DR Pfam: D10614; BAA01469.1; -.
DR PIR: J00268; J00268.
DR HSSP: P10279; IDWY.

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DR InterPro: IPR001610; PAC.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion_1.
 DR Pfam: PF03991; Prion_octapep; 5.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00086; PAC; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 24
 FT CHAIN 1 256
 FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DISULFID 182 217 BY SIMILARITY.
 FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
 FT REPEAT 54 62 0.
 FT REPEAT 63 70 1.
 FT REPEAT 71 78 2.
 FT REPEAT 79 86 3.
 FT REPEAT 87 95 4.
 FT REPEAT 95 95 5.
 SQ SEQUENCE 256 AA; 27880 MW; 0D969FFD903B30 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;
 Best Local Similarity 90.0%; Pred. No. 3.1e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Cy 1 ETDYKMERVVEQMCVTQYQ 20
 Db 203 ETDIKMERVVEQMCVTQYQ 222

RESULT 12
 PRP2 TRAST STANDARD; PRT; 256 AA.
 ID PRP2 TRAST STANDARD; PRT; 256 AA.
 AC P40273;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein 2 precursor (Prp) (Major scrapie-associated fibril protein 2).
 OS Trisulphus streptoceros (Greater kudu).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovidae; Bovinae; Tragelaphus.
 OX NCBI_TaxID=9946;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA Martin T.C., Hughes S.L., Hughes K.J., Dawson M.;
 RL Submitted (Aug-1993) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
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 CC EMBL; X74759; CAA52775.1; -

DR HSP: P10279; IDMY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion_1.
 DR Pfam: PF03991; Prion_octapep; 5.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 24
 FT CHAIN 1 256
 FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DISULFID 182 217 BY SIMILARITY.
 FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
 FT REPEAT 54 62 0.
 FT REPEAT 63 70 1.
 FT REPEAT 71 78 2.
 FT REPEAT 79 86 3.
 FT REPEAT 87 95 4.
 FT REPEAT 95 95 5.
 SQ SEQUENCE 256 AA; 28050 MW; D4D02CDBFC918743 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;
 Best Local Similarity 90.0%; Pred. No. 3.1e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Cy 1 ETDYKMERVVEQMCVTQYQ 20
 Db 203 ETDIKMERVVEQMCVTQYQ 222

RESULT 13
 PRIO BOVIN STANDARD; PRT; 264 AA.
 ID PRIO BOVIN STANDARD; PRT; 264 AA.
 AC P10279;
 DT 01-MAR-1989 (Rel. 10, Created)
 DT 01-NOV-1991 (Rel. 20, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein 1 precursor (Prp) (Major scrapie-associated fibril protein 1).
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovidae; Bovinae; Bos.
 OX NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian;
 RX MEDLINE=9116314; PubMed=1671225;
 RA Goldmann W., Hunter N., Martin T., Dawson M., Hope J.;
 RL "Different forms of the bovine Prp gene have five or six copies of a short, G-C-rich element within the protein-coding exon";
 RL J. Gen. Virol. 72:201-204 (1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=93118243; PubMed=1362024;
 RA Yoshimizu J., Iinuma T., Ishiguro N., Horiuchi M., Imamura M., Shingawa M.;
 RL "Comparative sequence analysis and expression of bovine Prp gene in mouse L-929 cells";
 RL Virus Genes 6:343-356 (1992).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=93179783; PubMed=8440932;
 RA Prusiner S.B., Fuzi M., Scott M., Serban D., Serban H., Bradley R., Taraboulos A., Gabriel J.M., Wells G.A., Wilesmith J.W., Bradley R.;
 RL "Immunologic and molecular biologic studies of prion proteins in bovine spongiform encephalopathy";
 RL J. Infect. Dis. 167:602-613 (1993).
 RN [4]

RP SEQUENCE FROM N.A.
 RC STRAIN-Holstein-Friesian; Tissue=Brain;
 RA Horiuchi M.;
 RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
 RN
 RP SEQUENCE FROM N.A.
 RC STRAIN=Jersey;
 RX MEDLINE=21422903; PubMed=11531705;
 RA Hills D., Conincini S., Schlaepfer J., Dolf G., Ferretti L.,
 RA Williams J.L.;
 RT "Complete genomic sequence of the bovine prion gene (PRNP) and
 RT polymorphism in its promoter region.";
 RL Anim. Genet. 32:231-232 (2001).
 RN
 RP SEQUENCE FROM N.A.
 RC STRAIN=Korean;
 RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.;
 RT "Nucleotide sequence of PrP cDNA in Korean cattle.";
 RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
 RN
 RP SEQUENCE OF 1-15 FROM N.A.
 RA Tanaka M., Inoue S., Ikeda T., Horiuchi M., Ishiuro N., Shingawa M.;
 RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
 RN
 RP SEQUENCE OF 25-36.
 RX MEDLINE=89057122; PubMed=2904126;
 RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.;
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-
 RT associated protein.";
 RL Nature 336:390-392 (1988).
 RN
 RP STRUCTURE BY NMR OF 132-241.
 RX MEDLINE=20359707; PubMed=10899999;
 RA Lopez Garcia F., Zahn R., Riek R., Wuehrich K.;
 RT "NMR structure of the bovine prion protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339 (2000).
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "folds".
 CC
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC -----
 CC EMBL; X55882; CA39368.1; -
 DR EMBL; D10612; BAA01467.1; -
 DR EMBL; D10613; BAA01468.1; -
 DR EMBL; S55629; AAB25614.1; -
 DR EMBL; AB001468; BAA19283.1; -
 DR EMBL; AJ298878; CAC37367.1; -
 DR EMBL; AF517842; AAM66709.1; -
 DR EMBL; D26151; BAA05138.1; -
 DR PIR; A54330; A54330.
 DR PDB; 1DMY; 26-FEB-02.
 DR PDB; 1DM2; 26-FEB-02.
 DR PDB; 1DX0; 26-FEB-02.
 DR PDB; 1DX1; 26-FEB-02.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 6.

DR PRINTS: PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Polymorphism;
 KW 3D-structure.
 FT SIGNAL 1 24
 FT CHAIN 25 264
 FT CARBOHD 192 192
 FT CARBOHD 208 208
 FT DISULFD 190 225
 FT DOMAIN 54 103
 FT
 FT REPEAT 54 62
 FT REPEAT 63 70
 FT REPEAT 71 78
 FT REPEAT 79 86
 FT REPEAT 87 94
 FT REPEAT 95 103
 FT VARIANT 71 78
 FT CONFLICT 218 218
 FT HELIX 136 138
 FT STRAND 140 141
 FT HELIX 155 162
 FT TURN 163 164
 FT HELIX 165 167
 FT STRAND 173 174
 FT HELIX 184 203
 FT TURN 204 206
 FT HELIX 204 211
 FT
 SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
 Query Match 98.1%; Score 101; DB 1; Length 264;
 Best Local Similarity 90.0%; Pred. No. 3.2e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVDMGRVVEQMCVTQYQ 20
 Db 211 ETDVDMGRVVEQMCVTQYQ 230
 RESULT 14
 ID PRP1 TRAST STANDARD; PRT; 264 AA.
 AC P40242;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last annotation update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein 1 precursor (PrP) (Major scrapie-associated fibril
 DE protein 1).
 OS Tragelephus strepsiceros (Greater kudu).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Bovinae; Tragelephus.
 OX NCBI_TaxID=9946;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA Martin T.C., Hughes S.L., Hughes K.J., Dawson M.;
 RL Submitted (AUG-1993) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells
 CC
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "folds".
 CC
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC use by non-profit institutions as long as its content is in no way
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DR EMBL: X74771; CAAS2781.1; -
 DR PIR: S37137; S37137.
 DR HSSP: P10279; IDMY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
 KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 24
 FT CHAIN 25 264
 FT CARBOHYD 192 192 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 208 208 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DISULFID 190 225 BY SIMILARITY.
 FT DOMAIN 54 103 6 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-G-
 FT
 FT REPEAT 54 62
 FT REPEAT 63 70
 FT REPEAT 71 78
 FT REPEAT 79 86
 FT REPEAT 87 94
 FT REPEAT 95 103
 SQ SEQUENCE 264 AA; 28644 MW; FEB73F417321951 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 264;
 Best Local Similarity 90.0%; Pred. No. 3.2e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVNMERVVEQMCITQYQ 20
 Db 211 ETDVNMERVVEQMCITQYQ 230

RESULT 15
 PRIO_ATEGE STANDARD; PRT; 232 AA.
 ID PRIO_ATEGE STANDARD; PRT; 232 AA.
 AC P40246;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Ateles geoffroyi (Black-handed spider monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
 OC NCBI_TaxID=9509;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL: U08309; AAC50097.1; -
 DR PIR: S71041; S71041.
 DR HSSP: P04156; TEIG.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 5.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 FT SIGNAL 1 15
 FT CHAIN 16 214
 FT PROPEP 215 >232
 FT LIPID 214 214
 FT DISULFID 163 198
 FT CARBOHYD 165 165 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DOMAIN 44 84 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-G-
 FT
 FT REPEAT 44 51
 FT REPEAT 52 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT NON TER 232 232
 SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 96.1%; Score 99; DB 1; Length 232;
 Best Local Similarity 90.0%; Pred. No. 6e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVNMERVVEQMCITQYQ 20
 Db 184 ETDVNMERVVEQMCITQYQ 203

Search completed: April 30, 2004, 15:29:28
 Job time : 9.58333 secs

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 42.0933 Seconds

(Without alignments)
149.949 Million cell updates/sec

Title: US-09-603-832-7

Perfect score: 103

Sequence: 1 ETDVQKMERVEQICVTQYQ 20

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :
1: SP_TREMBL_25: *
2: sp_archaea: *
3: sp_bacteria: *
4: sp_fungi: *
5: sp_human: *
6: sp_invertebrate: *
7: sp_mammal: *
8: sp_mhc: *
9: sp_organelle: *
10: sp_phage: *
11: sp_plant: *
12: sp_rodent: *
13: sp_virus: *
14: sp_vertebrate: *
15: sp_unclassified: *
16: sp_virus: *
17: sp_bacteriophage: *
17: sp_archaeap: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	240	11	Q8VHV4
2	103	100.0	248	11	Q8VHV5
3	103	100.0	253	11	Q9ZOT5
4	103	100.0	254	11	Q8VHV6
5	103	100.0	254	11	Q9ZOT4
6	103	100.0	254	11	Q8QY79
7	102	99.0	202	6	Q97696
8	102	99.0	220	6	Q866W7
9	101	99.0	248	6	Q866V6
10	101	98.1	200	6	Q97912
11	101	98.1	204	6	Q97629
12	101	98.1	204	6	Q97629
13	101	98.1	204	6	Q97629
14	101	98.1	211	6	Q97629
15	101	98.1	212	6	Q97629
16	101	98.1	215	6	Q97629

17	101	98.1	215	11	Q81W3
18	101	98.1	216	6	Q8TV00
19	101	98.1	220	6	Q82825
20	101	98.1	224	11	Q81W4
21	101	98.1	226	6	Q97907
22	101	98.1	235	6	Q97695
23	101	98.1	245	6	Q9M2U7
24	101	98.1	250	6	Q866V8
25	101	98.1	251	6	Q866V4
26	101	98.1	256	6	Q9M2U8
27	101	98.1	256	6	Q866V0
28	101	98.1	256	6	Q865Z6
29	101	98.1	256	6	Q863E9
30	101	98.1	256	6	Q863E8
31	101	98.1	256	6	Q02841
32	101	98.1	256	6	Q7YSF3
33	101	98.1	264	6	Q9VZU6
34	101	98.1	264	6	Q864M0
35	101	98.1	264	6	Q7YRN3
36	101	98.1	272	6	Q8M17
37	99	96.1	238	4	Q86XR1
38	99	96.1	285	4	Q75942
39	98	95.1	222	6	Q97913
40	98	95.1	226	6	Q866M5
41	98	95.1	227	6	Q97964
42	98	95.1	227	6	Q97906
43	98	95.1	237	6	Q866U8
44	98	95.1	242	6	Q866U5
45	98	95.1	247	6	Q866V7

ALIGNMENTS

RESULT 1

Q8VHV4 ID Q8VHV4 PRELIMINARY; PRT; 240 AA.
AC Q8VHV4; 01-MAR-2002 (TREMBLrel. 20, Created)
DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
NCBI_TaxID=29092;
RN [1]_TaxID=29092;
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nomo R.,
RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.,
RT "Easy transmission of sheep scrapie to wild rodents questions the
RT species barrier concept in the epidemiology of transmissible
RT spongiform encephalopathies."
RL Submitted (APR-2001) to the EMBL/GenBank/DBSJ databases.
DR EMBL; AF367625; AAL57232.1; --
DR HSSP; P10279; IDWY.
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; prion. 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP. 1.
DR PROSITE; PS00251; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON TER 1
FT NON TER 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 240;
Best Local Similarity 100.0%; Pred. No. 4.1e-09;
Matches 20; Conservativity 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20
 DB 192 ETDVXMMERVVEQMCVTQYQ 211

RESULT 2

ID Q8VHV6 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV6; 01-MAR-2002 (TREMBlrel. 20, Created)
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 DE 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 PR Prion protein (Fragment).
 GN PRP.

OS Clethrionomys glareolus (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Clethrionomys.
 CX NCBI_Taxid=51090;
 RN [1]

RP SEQUENCE FROM N.A.
 RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Garbo G., Kretzschmar H.A., Wolter D.P., Lipp H.P.;
 RT "Easy transmission of sheep scrapie to wild rodents questions the
 RT species barrier concept in the epidemiology of transmissible
 RT spongiform encephalopathies.";
 RL Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF367624; AAL57231.1; -.
 DR HSSP; P10279; IDMY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion; 1.
 DR Pfam; PF03991; prion.octapep; 6.
 DR PRINTS; PRO0341; PRION.
 DR SMART; SMO0157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR NON_TER 248 248
 FT NON_TER 248 248
 SQ SEQUENCE 248 AA; 27259 MW; 81564ECD2773C2C CRC64;

Query Match 100.0%; Score 103; DB 11; Length 248;
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20
 DB 200 ETDVXMMERVVEQMCVTQYQ 219

RESULT 3

ID Q9ZOT5 PRELIMINARY; PRT; 253 AA.
 AC Q9ZOT5; 01-MAY-1999 (TREMBlrel. 10, Created)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DE 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 PR Prion protein (Fragment).
 GN PRP.

OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
 OC Meriones.
 CX NCBI_Taxid=10047;
 RN [1]

RP SEQUENCE FROM N.A.

RA MEDLINE=99303687; PubMed=10373359;
 RA Wofner F., Weidenhofer G., Schneider R., von Brunn A., Gluch S.,
 RA Schwarz T.F., Werner T., Scharz H.M.;

RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 RT of flexible regions of the prion protein.";
 RL J Mol. Biol. 289:1163-1176 (1999).
 DR EMBL; AF117314; AAD19985.1; -.
 DR HSSP; P04925; IAG2.

DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion; 1.
 DR Pfam; PF03991; prion.octapep; 6.
 DR PRINTS; PRO0341; PRION.
 DR SMART; SMO0157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR NON_TER 253 253
 FT NON_TER 253 253
 SQ SEQUENCE 253 AA; 27747 MW; B44D16867A97307F CRC64;

Query Match 100.0%; Score 103; DB 11; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20
 DB 199 ETDVXMMERVVEQMCVTQYQ 218

RESULT 4

ID Q8VHV6 PRELIMINARY; PRT; 254 AA.
 AC Q8VHV6; 01-MAR-2002 (TREMBlrel. 20, Created)
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 DE 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 PR Prion protein.
 GN PRP.

OS Apodemus sylvaticus (European woodmouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 OC Apodemus.
 CX NCBI_Taxid=10129;
 RN [1]

RP SEQUENCE FROM N.A.
 RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Garbo G., Kretzschmar H.A., Wolter D.P., Lipp H.P.;
 RT "Easy transmission of sheep scrapie to wild rodents questions the
 RT species barrier concept in the epidemiology of transmissible
 RT spongiform encephalopathies.";
 RL Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF367623; AAL57230.1; -.
 DR HSSP; P10279; IDMY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion; 1.
 DR Pfam; PF03991; prion.octapep; 6.
 DR PRINTS; PRO0341; PRION.
 DR SMART; SMO0157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR NON_TER 254 254
 FT NON_TER 254 254
 SQ SEQUENCE 254 AA; 27857 MW; CE2E5658C47A8885 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 254;
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20
 DB 200 ETDVXMMERVVEQMCVTQYQ 219

RESULT 5

ID Q9ZOT4 PRELIMINARY; PRT; 254 AA.
 AC Q9ZOT4; 01-MAY-1999 (TREMBlrel. 10, Created)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DE 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 PR Prion protein (Fragment).
 GN PRP.

OS Sigmodon fulviventer (cawny-bellied cotton rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;

OC Sigmodon.
 NCBI_TaxID=89246;
 RN
 SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF117324; AAD19995.1;
 DR HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion; octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SMO0157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 254 254
 SQ SEQUENCE 254 AA; 27904 MM; 9EB7E1D106B43B97 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 254;
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
 Db 200 ETDVMMERVVEQMCVTQYQ 219

RESULT 6
 ID Q9QYT9 PRELIMINARY; PRT; 254 AA.
 AC Q9QYT9;
 DT 01-MAY-2000 (TrEMBLrel. 13, Created)
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Long incubation prion protein.
 GN PRNP.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99018115; PubMed=8799790;
 RA Lee I.Y., Westaway D., Smit A.F., Wang K., Seto J., Chen L.,
 RA Acharya C., Ankener M., Baskin D., Cooper C., Yao H., Prusiner S.B.,
 RA Hood L.E.;
 RT "Complete genomic sequence and analysis of the prion protein gene
 region from three mammalian species.";
 RL Genome Res. 8:1022-1037(1998).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99457485; PubMed=10525406;
 RA Moore R.C., Lee I.Y., Silverman G.L., Harrison P.M., Strone R.,
 RA Heinrich C., Karunaratne A., Pasternak S.H., Chishti M.A., Liang Y.,
 RA Mastrangelo P., Wang K., Smit A.F.A., Katamine S., Carlson G.A.,
 RA Cohen F.E., Prusiner S.B., Melton D.W., Tremblay P., Hood L.E.,
 RA Westaway D.;
 RT "Ataxia in prion protein (PrP)-deficient mice is associated with
 upregulation of the novel PrP-like protein doppel.";
 RL J. Mol. Biol. 292:797-817(1999).
 DR EMBL; U29187; AAD41440.1;
 DR HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03377; Prion; 1.
 DR Pfam; PF03991; Prion; octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SMO0157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.
 SQ SEQUENCE 254 AA; 28010 MM; DE90DCEH586CC0 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 254;
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
 Db 199 ETDVMMERVVEQMCVTQYQ 218

RESULT 7
 ID Q97696 PRELIMINARY; PRT; 202 AA.
 AC Q97696;
 DT 01-MAY-1999 (TrEMBLrel. 10, Created)
 DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Lama glama (Lama).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Lama.
 NCBI_TaxID=9844;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF113943; AAD13291.1;
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion; octapep; 6.
 DR SMART; SMO0157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 202 202
 SQ SEQUENCE 202 AA; 21860 MM; FC45232DB773F354 CRC64;

Query Match 99.0%; Score 102; DB 6; Length 202;
 Best Local Similarity 95.0%; Pred. No. 5e-09;
 Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVMMERVVEQMCVTQYQ 20
 Db 163 ETDVMMERVVEQMCVTQYQ 182

RESULT 8
 ID Q866W7 PRELIMINARY; PRT; 220 AA.
 AC Q866W7;
 DT 01-JUN-2003 (TrEMBLrel. 24, Created)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRNP.
 OS Ochotona princeps (Southern American pika).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Lagomorpha; Ochotonidae; Ochotona.
 NCBI_TaxID=9978;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=22408137; PubMed=12519913;
 RA van Rheede T., Smolensars M.W., Madsen O., De Jong W.W.;
 RT "Molecular evolution of the mammalian prion protein.";

```

RL Mol. Biol. Evol. 20:111-121 (2003).
DR EMBL: AY13036; AAN16490.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion_octapep; 5.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1 1
FT NON_TER 220 220
SQ SEQUENCE 220 AA; 23872 MW; 5318CF0BE39FB669 CRC64;

Query Match
Best Local Similarity 99.0%; Score 102; DB 6; Length 220;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVAKMERVVEQMCVTQYQ 20
Db 175 ETDVAKMERVVEQMCVTQYQ 194

RESULT 9
Q866V6 PRELIMINARY; PRT; 248 AA.
ID Q866V6;
AC 01-JUN-2003 (TRENBLREL. 24, Created)
DT 01-JUN-2003 (TRENBLREL. 24, Last sequence update)
DE 01-OCT-2003 (TRENBLREL. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Dicerus bicornis (Black rhinoceros).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Perissodactyla; Rhinocerotidae; Dicerus.
OX NCBI_TaxID=9805;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22408137; PubMed=12519913;
RA van Rheede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
RL Mol. Biol. Evol. 20:111-121 (2003).
DR EMBL: AY13036; AAN16506.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion_octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 248 248
FT NON_TER 26915 MW; 38FFDCFD2A5B909 CRC64;
SQ SEQUENCE 248 AA; 26915 MW; 38FFDCFD2A5B909 CRC64;

Query Match
Best Local Similarity 99.0%; Score 102; DB 6; Length 248;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVAKMERVVEQMCVTQYQ 20
Db 203 ETDVAKMERVVEQMCVTQYQ 222

RESULT 10
Q97912 PRELIMINARY; PRT; 200 AA.
ID Q97912;
AC 097912;
DT 01-MAY-1999 (TRENBLREL. 10, Created)
DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)
DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Bison bonaeus (European bison).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

```

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OC Bovidae; Bovinae; Bison.
OX NCBI_TaxID=9902;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE=Peripheral blood leukocytes;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Scharl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176 (1999).
DR EMBL: AF117328; AAD19999.1; -.
DR HSSP: P10279; IDWY.
DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO: GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion_octapep; 6.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1 1
FT NON_TER 200 200
SQ SEQUENCE 200 AA; 21674 MW; 1F270CDF4BE5271B CRC64;

Query Match
Best Local Similarity 98.1%; Score 101; DB 6; Length 200;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVAKMERVVEQMCVTQYQ 20
Db 168 ETDVAKMERVVEQMCVTQYQ 187

RESULT 11
Q97629 PRELIMINARY; PRT; 204 AA.
ID Q97629;
AC 097629;
DT 01-MAY-1999 (TRENBLREL. 10, Created)
DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)
DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Odocoileus virginianus (white-tailed deer).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
OC Cervidae; Odocoileinae; Odocoileus.
OX NCBI_TaxID=9874;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE=Brain;
RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
RT "PRP alleles in free ranging and captive white tailed deer (Odocoileus
virginianus)";
RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF091558; AAC69626.1; -.
DR HSSP: P10279; IDWY.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion_octapep; 5.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1 1
FT NON_TER 204 204
SQ SEQUENCE 204 AA; 22154 MW; CA6A68F2B49C81E CRC64;

Query Match
Best Local Similarity 98.1%; Score 101; DB 6; Length 204;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 ETDVKKMERVVEQMCVTQYQ 20
 Db 180 ETDIKMERVVEQMCITQYQ 199

RESULT 12

Q9TS17 PRELIMINARY; PRT; 204 AA.
 AC Q9TS17;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Odocoius virginianus (white-tailed deer).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;
 OC Cervidae; Odocoileinae; Odocoileus.
 CX NCBI_TaxID=9874;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "Prp alleles in free ranging and captive white tailed deer (Odocoileus virginianus).";
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF091560; AAC69628.1; -.
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 204 204
 SQ SEQUENCE 204 AA; 22184 MW; CA9BA283AF54081E CRC64;

Query Match 98.1%; Score 101; DB 6; Length 204;
 Best Local Similarity 90.0%; Pred. No. 7.5e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
 Db 180 ETDIKMERVVEQMCITQYQ 199

RESULT 13

Q9TS18 PRELIMINARY; PRT; 204 AA.
 AC Q9TS18;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Odocoileus virginianus (white-tailed deer).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;
 OC Cervidae; Odocoileinae; Odocoileus.
 CX NCBI_TaxID=9874;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "Prp alleles in free ranging and captive white tailed deer (Odocoileus virginianus).";
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF091559; AAC69627.1; -.
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.

DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 204 204
 SQ SEQUENCE 204 AA; 22181 MW; CA962B93FA84D4D3 CRC64;

Query Match 98.1%; Score 101; DB 6; Length 204;
 Best Local Similarity 90.0%; Pred. No. 7.5e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
 Db 180 ETDIKMERVVEQMCITQYQ 199

RESULT 14

Q97787 PRELIMINARY; PRT; 211 AA.
 AC Q97787;
 DT 01-NOV-1998 (TREMBLrel. 08, Created)
 DT 01-NOV-1998 (TREMBLrel. 08, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Antilocapra americana (Pronghorn).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidae;
 OC Antilocapridae; Antilocapra.
 CX NCBI_TaxID=9891;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "Prp gene of pronghorn antelope (Antilocapra americana) contains 6 octapeptide repeats.";
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF090852; AAC45030.1; -.
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 6.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 211 211
 SQ SEQUENCE 211 AA; 22832 MW; B8E147ADF9A6752 CRC64;

Query Match 98.1%; Score 101; DB 6; Length 211;
 Best Local Similarity 90.0%; Pred. No. 7.7e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
 Db 188 ETDIKMERVVEQMCITQYQ 207

RESULT 15

Q97698 PRELIMINARY; PRT; 212 AA.
 AC Q97698;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Cervus elaphus canadensis (wapiti).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;
 OC Cervidae; Cervinae; Cervus.
 CX NCBI_TaxID=9861;
 RN [1]

```

RP  SEQUENCE FROM N.A.
RX  MEDLINE=97317555; PubMed=974569;
RA  Schatzl H.M., Wopfner F., Gleich S., von Brunn A., Jager G.,
RT  "Is codon 129 of prion protein polymorphic in human beings but not in
RL  animals?";
RN  Lancet 349:1603-1604(1997).
(2)
RP  SEQUENCE FROM N.A.
RX  MEDLINE=99303687; PubMed=10373359;
RA  Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gleich S.,
RT  "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RL  of flexible regions of the prion protein.";
RN  J. Mol. Biol. 289:1163-1178(1999).
DR  EMBL; AF13945; AAD13293.1; -.
DR  HSSP; P10279; IDVY.
DR  InterPro; IPR00817; Prion.
DR  Pfam; PF00377; Prion; 1.
DR  Pfam; PF03991; Prion_octapep; 5.
DR  SMART; SM00157; PRP; 1.
DR  PROSITE; PS00291; PRION_1; 1.
DR  PROSITE; PS00706; PRION_2; 1.
FT  NON_TER 1
FT  NON_TER 1
FT  NON_TER 1
SQ  SEQUENCE 212 AA; 23032 MW; 5758ABDF5E2A1B5 CRC64;
OY  1 ETDVMMERVVEQMCVTQYQ 20
Db  167 ETDIKMERVVEQMCITQYQ 186

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Query Match          98.1%; Score 101; DB 6; Length 212;
Best Local Similarity 90.0%; Pred. No. 7.8e-09;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

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Search Completed: April 30, 2004, 15:31:22
 Job time : 42.0833 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 14.5933 Seconds
(without alignments)
131.920 Million cell updates/sec

Title: US-09-603-832-7

Perfect score: 103

Sequence: 1 ETDVKKMERVVEQMCVTQYQ 20

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : PIR 78:*

1: Dir1:*

2: Dir2:*

3: Dir3:*

4: Dir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	103	100.0	226	A33892	prion-related prot
2	103	100.0	254	A34759	prion protein - ch
3	103	100.0	254	B34759	prion protein - go
4	103	100.0	254	A23544	major prion protei
5	101	98.1	256	UJ0268	major prion protei
6	101	98.1	264	S37137	prion protein - gr
7	101	98.1	264	A54330	major prion protei
8	99	96.1	232	S71041	major prion protei
9	99	96.1	241	S71056	major prion protei
10	99	96.1	241	S71048	major prion protei
11	99	96.1	245	S71045	major prion protei
12	99	96.1	252	I61848	major prion protei
13	99	96.1	253	UJHU	major prion protei
14	99	96.1	253	UJHU	major prion protei
15	99	96.1	253	S53635	prion protein - st
16	99	96.1	253	I61847	major prion protei
17	99	96.1	253	I84443	major prion protei
18	99	96.1	253	S71055	major prion protei
19	97	94.2	252	UJ06175	prion protein - ra
20	97	94.2	256	S37149	prion protein - go
21	97	94.2	256	A54281	major prion protei
22	96	93.2	257	UJ01900	major prion protei
23	96	91.3	245	S53627	major prion protei
24	96	91.3	252	S53634	major prion protei
25	96	91.3	253	S53631	major prion protei
26	96	91.3	253	S53618	major prion protei
27	94	91.3	253	S53619	major prion protei
28	94	91.3	253	S53620	major prion protei
29	94	91.3	253	S53623	major prion protei

30	94	91.3	253	S53624	major prion protei
31	94	91.3	253	S53625	major prion protei
32	94	91.3	253	S53617	major prion protei
33	94	91.3	253	S53614	major prion protei
34	94	91.3	253	S53616	major prion protei
35	94	91.3	254	UJHYH	major prion protei
36	94	91.3	257	A23545	major prion prp27
37	94	91.3	260	S53629	major prion protei
38	90	87.4	239	S53633	major prion protei
39	50	48.5	267	1 UJCH	major prion protei
40	50	48.5	267	1 A37372	prion protein homo
41	50	48.5	273	A46280	prion protein - ch
42	46	44.7	2241	2 S09811	hypothetical prote
43	44	42.7	766	2 T47944	hypothetical prote
44	43	41.7	264	2 I39141	transcription fact
45	43	41.7	319	2 F83402	binding protein co

ALIGNMENTS

RESULT 1

A33892 prion-related protein - rat (fragment)

C:Species: Rattus norvegicus (Norway rat)

C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 13-Aug-1999

C/Accession: A53892

R/L:Lab: Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A>Title: Cloning of rat "prion-related protein" cDNA.

A:Reference number: A53892; MUID:88037055; PMID:2889848

A:Accession: A53892

A>Status: Preliminary

A:Molecule type: mRNA

A:Residues: 1-226 <LHA>

A:Cross-references: GB:M20313; NID:G206392; PIDN:AAA41947.1; PID:G206392

C:Superfamily: major prion protein

Query Match 100.0%; Score 103; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 2.3e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
DB 172 ETDVKKMERVVEQMCVTQYQ 191

RESULT 2

A34759 prion protein - Chinese hamster

C:Species: Cricetus griseus (Chinese hamster)

C>Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999

C/Accession: A34759

R/L:Lab: D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner

Mol. Cell. Biol. 10, 1153-1163, 1990

A>Title: Three hamster species with different scrapie incubation times and neuropatholog

A:Reference number: A34759; MUID:90158578; PMID:2406562

A:Accession: A34759

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-254 <LOW>

A:Cross-references: GB:M33956; NID:G191180; PIDN:AAA37013.1; PID:G387056

C:Superfamily: major prion protein

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 2.3e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
DB 200 ETDVKKMERVVEQMCVTQYQ 219

RESULT 3

B34759

p10n protein - golden hamster

C/Species: Mesocricetus auratus (golden hamster)

C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999

C/Accession: B34759

R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner

Mol. Cell. Biol. 10, 1153-1163, 1990

A/Title: Three hamster species with different scrapie incubation times and neuropathology

A/Accession: B34759

A/Status: preliminary

A/Molecule type: DNA

A/Residues: 1-254 <LOW>

A/Cross-References: GB:M33959, NID:G191182, PIDN:AAA37014.1, PID:G191183

C/Superfamily: major prion protein

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 2.3e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20

Db 200 ETDVQMERVVEQMCVTQYQ 219

RESULT 4

A23544

major prion protein precursor - mouse

N/Alternate names: PrP; Scrapie prion

C/Species: Mus musculus (house mouse)

C/Date: 22-Jul-1997 #sequence_revision 22-Jul-1997 #text_change 11-Aug-2003

C/Accession: A29569; A23544; S02521; A22315

R/Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29569; MUID:88052859; PMID:2890436

A/Accession: A29569

A/Molecule type: DNA

A/Residues: 1-254 <MES>

A/Cross-References: GB:M18070, NID:G200528, PIDN:AAA39997.1, PID:G200529

A/Experimental source: strains NZW and I/LmT

A/Note: The sequence shown is from the NZW strain; the sequence from the I/LmT strain di

R/Locht, C.; Chesbro, B.; Race, R.; Keith, J.M.

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:66313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a

A/Reference number: S02521; MUID:88166695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOB>

R/Chesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u

A/Reference number: A22315; MUID:85213844; PMID:3393361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHE>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphoryl

F/1-22/Domains: signal sequence #status predicted <SIG>

F/23-231/Product: major prion protein #status predicted <MAT>

F/233-254/Domains: carboxyl-terminal propeptide #status predicted <CTP>

F/178-213/Disulfide bonds: #status predicted

F/180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Best Local Similarity 100.0%; Pred. No. 2.3e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20

Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 5

J10268

major prion protein 2 precursor - bovine

N/Alternate names: prion protein, short variant; PrP protein

C/Species: Bos primigenius taurus (cattle)

C/Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 23-Mar-1995

C/Accession: J10268

R/Yoshimoto, T.; Iinuma, T.; Ishiguro, N.; Horuchi, M.; Imamura, M.; Shinagawa, M.

submitted to JIPID, November 1991

A/Reference number: J10268

A/Accession: J10268

A/Molecule type: DNA

A/Residues: 1-256 <YOS>

C/Superfamily: major prion protein

C/Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat

F/1-24/Domains: signal sequence #status predicted <SIG>

F/25-256/Product: major prion protein 2 #status predicted <MAT>

F/50-91/Region: 8-residue repeats

F/182-217/Disulfide bonds: #status predicted

F/184-200/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 98.1%; Score 101; DB 2; Length 256;

Best Local Similarity 90.0%; Pred. No. 5e-09;

Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20

Db 203 ETDVQMERVVEQMCVTQYQ 222

RESULT 6

S37137

prion protein - greater kudu

C/Species: Tragelaphus streptoceros (greater kudu)

C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 13-Aug-1999

C/Accession: S37137

R/Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.

submitted to the EMBL Data Library, August 1993

A/Reference number: S37137

A/Accession: S37137

A/Status: preliminary

A/Molecule type: DNA

A/Residues: 1-264 <MA>

A/Cross-References: EMBL:X74771; NID:G398937; PIDN:CAA52781.1; PID:G398938

C/Superfamily: major prion protein

Query Match 98.1%; Score 101; DB 2; Length 264;

Best Local Similarity 90.0%; Pred. No. 5.2e-09;

Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20

Db 211 ETDVQMERVVEQMCVTQYQ 230

RESULT 7

A54330

major prion protein 1 precursor - bovine

N/Alternate names: prion protein, long variant; PrP protein

C/Species: Bos primigenius taurus (cattle)

C/Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 02-Mar-2001

C/Accession: A54330; J10953; J10952; A48551; S07347; I46931

R/Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.

J. Gen. Virol. 72, 201-204, 1991

A/Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C-

A:Reference number: A54330; MUID:91116314; PMID:1671225
 A:Accession: A54330
 A:Molecule type: DNA
 A:Residues: 1-264 <GOL>
 A:Cross-references: GB:X55882; NID:G683; PIDN:CAA39368.1; PID:G684
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.
 Submitted to JIPID, November 1991
 A:Reference number: JTO952
 A:Accession: JTO952
 A:Molecule type: DNA
 A:Residues: 1-264 <YOS>
 A:Cross-references: GB:D10613; NID:G217595; PIDN:BA01468.1; PID:G217596
 A:Accession: JTO952
 A:Molecule type: DNA
 A:Residues: 1-217 'K', 219-264 <YOS>
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.
 Virus Genes 6, 343-356, 1992
 A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929
 A:Reference number: A48551; MUID:93118243; PMID:1362024
 A:Accession: A48551
 A:Molecule type: mRNA
 A:Residues: 1-217 'K', 219-264 <YOS>
 A:Cross-references: GB:AB001469; NID:G1888342; PIDN:BA19253.1; PID:G1888343
 A:Experimental source: Brain
 A:Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBI:P121621)
 R:Hope, J.; Reekie, L.J.D.; Hunter, N.; Mulhaup, G.; Beyreuther, K.; White, H.; Scott, N.
 Nature 336, 390-392, 1988
 A:Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
 A:Reference number: S07347; MUID:89051122; PMID:2904126
 A:Accession: S07347
 A:Molecule type: protein
 A:Residues: 25-36 <HOP>
 R:Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, J.
 Infect. Dis. 167, 602-613, 1993
 A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform
 A:Reference number: 146931; MUID:93179783; PMID:8440932
 A:Accession: 146931
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-264 <PRU>
 A:Cross-references: GB:S55629; NID:G266111; PIDN:AA82514.1; PID:G266112
 C:Genetics:
 A:Gene: PrP
 C:Superfamily: major prion protein
 C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 F:1-24/Domain: signal sequence #status predicted <SIG>
 F:25-264/Product: major prion protein 1 #status predicted <MAT>
 F:60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G-G)
 F:180-225/Disulfide bonds: #status predicted
 F:192,208/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 98.1%; Score 101; DB 2; Length 264;
 Best Local Similarity 90.0%; Pred. No. 5,2e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

CY 1 ETDVQMERVVEQMCVTQYQ 20
 Db 211 ETDVQMERVVEQMCVTQYQ 230

RESULT 8
 S71041
 major prion protein - black-handed spider monkey (fragment)
 C:Species: Ateles geoffroyi (black-handed spider monkey)
 C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S71041; S53630
 R:Schatz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71041
 A:Molecule type: DNA
 A:Residues: 1-232 <SCH>
 A:Cross-references: EMBL:U08309; NID:G474376; PIDN:AACS0097.1; PID:G474377

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1998
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53614
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-194, 'R', 196-231 <SCH>
 A:Cross-references: EMBL:U08309
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 232;
 Best Local Similarity 90.0%; Pred. No. 9.7e-09;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

CY 1 ETDVQMERVVEQMCVTQYQ 20
 Db 184 ETDVQMERVVEQMCVTQYQ 203

RESULT 9
 S71056
 major prion protein - mandrill (fragment)
 C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
 C:Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S71056; S53621
 R:Schatz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71056
 A:Molecule type: DNA
 A:Residues: 1-241 <SCH>
 A:Cross-references: EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G474365
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53621
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-203, 'R', 205-240 <SCH>
 A:Cross-references: EMBL:U08303
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 241;
 Best Local Similarity 90.0%; Pred. No. 1e-08;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

CY 1 ETDVQMERVVEQMCVTQYQ 20
 Db 193 ETDVQMERVVEQMCVTQYQ 212

RESULT 10
 S71048
 major prion protein - Callithrix jacchus (fragment)
 C:Species: Callithrix jacchus
 C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S71048; S53632
 R:Schatz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71048
 A:Molecule type: DNA
 A:Residues: 1-241 <SCH>
 A:Cross-references: EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G475586
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53632

A/Cross-references: GB:S71208; NID:g239877; PIDN:AA820521.1; PID:g239878; GB:S71210; NID
 C:Gene: GDB:PRNP, CJD, PRP
 A/Cross-references: GDB:120720; OMIM:176640; OMIM:137440
 A:Map position: 20pter-20p12
 A:Introns: #status absent
 A>Note: this gene is associated with Creutzfeldt-Jacob disease (CJD), Gerstmann-Strausler
 C:Superfamily: major prion protein
 C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl
 F:1-22/Domain: signal sequence #status predicted <SIG>
 F:23-230/Product: major prion protein #status predicted <MAT>
 F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
 F:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F:179-214/Disulfide bonds: #status predicted
 F:181,197/Binding sites: carbohydrate (Asn) (covalent) #status predicted
 F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match

Best Local Similarity 96.1%; Score 99; DB 1; Length 253;
 Best Local Similarity 90.0%; Pred. No. 1.1e-08;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20
 |||||
 Db 200 ETDVXMMERVVEQMCVTQYE 219

RESULT 14

major prion protein precursor - gorilla
 C/Species: Gorilla gorilla (gorilla)
 C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
 C/Accession: 137032
 R:Cervanekova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; I
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A>Title: Infectious amyloid precursor gene sequences in primates used for experimental
 A/Reference number: 136907; MUID:95083651; PMID:7991600
 A/Accession: 137032
 A>Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-253 <RES>
 A/Cross-references: EMBL:U15166; NID:9563208; PIDN:AA68633.1; PID:9563209
 C:Superfamily: major prion protein

Query Match 96.1%; Score 99; DB 2; Length 253;
 Best Local Similarity 90.0%; Pred. No. 1.1e-08;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20
 |||||
 Db 200 ETDVXMMERVVEQMCVTQYE 219

RESULT 15

prion protein - siamang
 C/Species: Hylobates syndactylus (siamang)
 C/Date: 15-Jul-1995 #sequence_revision 15-Apr-1996 #text_change 13-Aug-1999
 C/Accession: S53635
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A>Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53635
 A>Status: nucleic acid sequence not shown; translation not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A/Cross-references: EMBL:U08308; NID:9474374; PIDN:AA50096.1; PID:9474375
 A>Note: the source was designated as Symphalangus syndactylus
 A>Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
 C:Superfamily: major prion protein

Query Match 96.1%; Score 99; DB 2; Length 253;

Best Local Similarity 90.0%; Pred. No. 1.1e-08;
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20
 |||||
 Db 200 ETDVXMMERVVEQMCVTQYE 219

Search completed: April 30, 2004, 15:32:09
 Job time : 14.5633 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:28:59 ; Search time 44.5833 Seconds
(without alignments)
124.347 Million cell updates/sec

Title: US-09-603-832-7

Sequence: 1 ETVKXMERVVEQMCTQYQ 20

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 118120 seqs, 277189581 residues

Total number of hits satisfying chosen parameters: 118120

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: Published Applications AA:
2: /cgn2_6/prodata/1/pubpa/US07_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubpa/US06_NEW_PUB.pep:*
4: /cgn2_6/prodata/1/pubpa/US06_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	124	14	US-10-050-902-324
2	103	100.0	124	14	US-10-050-898-324
3	103	100.0	124	15	US-10-346-190-93
4	103	100.0	164	9	US-09-745-003-12
5	103	100.0	225	14	US-10-301-488A-25
6	103	100.0	226	14	US-10-205-194-121
7	103	100.0	254	9	US-09-943-906-1
8	103	100.0	254	12	US-10-438-628-2
9	103	100.0	254	13	US-10-106-574-5
10	103	100.0	254	13	US-10-106-574-6
11	103	100.0	254	13	US-10-106-574-7
12	103	100.0	254	13	US-10-106-574-8
13	103	100.0	254	14	US-10-355-780-10
14	103	100.0	254	14	US-10-304-630-20
15	103	100.0	254	14	US-10-304-630-21

16	103	100.0	254	14	US-10-304-630-22	Sequence 22, Appl
17	103	100.0	254	14	US-10-304-630-23	Sequence 23, Appl
18	103	100.0	254	14	US-10-301-488A-24	Sequence 24, Appl
19	103	100.0	254	15	US-10-410-907A-6	Sequence 6, Appl
20	103	100.0	254	15	US-10-410-907A-7	Sequence 7, Appl
21	103	100.0	254	15	US-10-410-907A-9	Sequence 9, Appl
22	103	100.0	254	15	US-10-410-907A-10	Sequence 10, Appl
23	103	100.0	254	15	US-10-346-190-87	Sequence 87, Appl
24	103	100.0	254	15	US-10-435-602-1	Sequence 1, Appl
25	103	100.0	350	14	US-10-050-902-323	Sequence 323, App
26	103	100.0	350	14	US-10-050-898-323	Sequence 323, App
27	103	100.0	350	15	US-10-346-190-92	Sequence 92, Appl
28	103	100.0	439	13	US-10-115-984-2	Sequence 2, Appl
29	102	99.0	263	9	US-09-943-906-3	Sequence 3, Appl
30	102	99.0	263	13	US-10-435-602-3	Sequence 3, Appl
31	101	98.1	117	14	US-10-050-902-349	Sequence 349, App
32	101	98.1	117	14	US-10-050-898-349	Sequence 349, App
33	101	98.1	117	15	US-10-346-190-90	Sequence 90, Appl
34	101	98.1	161	9	US-09-745-003-9	Sequence 9, Appl
35	101	98.1	256	13	US-10-109-551-2	Sequence 2, Appl
36	101	98.1	256	13	US-10-109-551-6	Sequence 6, Appl
37	101	98.1	256	13	US-10-109-551-8	Sequence 8, Appl
38	101	98.1	256	13	US-10-109-551-10	Sequence 10, Appl
39	101	98.1	256	14	US-10-304-630-26	Sequence 26, Appl
40	101	98.1	256	15	US-10-346-190-82	Sequence 82, Appl
41	101	98.1	256	15	US-10-346-190-83	Sequence 83, Appl
42	101	98.1	256	15	US-10-346-190-84	Sequence 84, Appl
43	101	98.1	263	14	US-10-301-488A-31	Sequence 31, Appl
44	101	98.1	264	14	US-10-209-194-2	Sequence 2, Appl
45	101	98.1	264	14	US-10-355-780-11	Sequence 11, Appl

ALIGNMENTS

RESULT 1
US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Tisot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT FILING DATE: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262.379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288.549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326.998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331.045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRP
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrPt construct
US-10-050-902-324
Query Match 100.0%; Score 103; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.6e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
|||
Db 80 ETDVXMERVVEQMCVTQYQ 99

RESULT 2
US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Ploesek, Christine
; APPLICANT: Ortman, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.019005
; CURRENT APPLICATION NUMBER: US/10/050,898
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 103; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.6e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
|||
Db 80 ETDVXMERVVEQMCVTQYQ 99

RESULT 3
US-10-346-190-93
; Sequence 93, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pellicoli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prior Protein Carrier-Conjugates
; FILE REFERENCE: 1700.029003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21

;; PRIOR APPLICATION NUMBER: 10/050,902
;; PRIOR FILING DATE: 2002-01-18
;; NUMBER OF SEQ ID NOS: 164
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 93
;; LENGTH: 124
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 103; DB 15; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.6e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
|||
Db 80 ETDVXMERVVEQMCVTQYQ 99

RESULT 4
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazar, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: Prp2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: Rodent
US-09-745-003-12

Query Match 100.0%; Score 103; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 7.6e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
|||
Db 109 ETDVXMERVVEQMCVTQYQ 128

RESULT 5
US-10-301-488A-25
; Sequence 25, Application US/10301488A
; Publication No. US2003016558A1
; GENERAL INFORMATION:
; APPLICANT: PRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; APPLICANT: SIGURDSSON, Einar
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; TITLE OF INVENTION: IMMUNE RESPONSE THERETO
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301,488A
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/331,801
; PRIOR FILING DATE: 2001-11-21
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 25
; LENGTH: 225
; TYPE: PRT
; ORGANISM: Rat
US-10-301-488A-25

Query Match 100.0%; Score 103; DB 14; Length 225;
Best Local Similarity 100.0%; Pred. No. 1.1e-06;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
Db 172 ETDVXMERVVEQMCVTQYQ 191

RESULT 6
US-10-205-194-121
; Sequence 121, Application US/10205194
; Publication No. US20030134301A1
; GENERAL INFORMATION:
; APPLICANT: Warner-Lambert Company
; APPLICANT: Lee, Kevin
; APPLICANT: Dixon, Alistair
; APPLICANT: Brooksbank, Robert
; APPLICANT: Pinnock, Robert
; TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain
; FILE REFERENCE: WI-A-018201
; CURRENT APPLICATION NUMBER: US/10/205.194
; PRIOR FILING DATE: 5200-07-24
; PRIOR APPLICATION NUMBER: GB 0118354.0
; NUMBER OF SEQ ID NOS: 177
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 121
; LENGTH: 226
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; FEATURE:
; OTHER INFORMATION: Prp
US-10-205-194-121

Query Match 100.0%; Score 103; DB 14; Length 226;
Best Local Similarity 100.0%; Pred. No. 1.1e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
Db 172 ETDVXMERVVEQMCVTQYQ 191

RESULT 7
US-09-943-906-1
; Sequence 1, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; Williamson, R. Anthony
; Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE Prp
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/943.906
; FILING DATE: 30-Aug-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/550.374
; FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Query Match 100.0%; Score 103; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
Db 199 ETDVXMERVVEQMCVTQYQ 218

RESULT 8
US-10-438-628-2
; Sequence 2, Application US/10438628
; Publication No. US20040048237A1
; GENERAL INFORMATION:
; APPLICANT: Lindquist et al.
; TITLE OF INVENTION: MAMMALIAN PRION PROTEINS AND TRANSGENIC MICE EXPRESSING THEM
; FILE REFERENCE: WTEL-P01-004
; CURRENT APPLICATION NUMBER: US/10/438.628
; PRIOR FILING DATE: 2003-05-15
; PRIOR APPLICATION NUMBER: 60/380950
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/380953
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/419569
; PRIOR FILING DATE: 2002-10-17
; PRIOR APPLICATION NUMBER: 60/419574
; PRIOR FILING DATE: 2002-10-17
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-438-628-2

Query Match 100.0%; Score 103; DB 12; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20
Db 199 ETDVXMERVVEQMCVTQYQ 218

RESULT 9
US-10-106-574-5
; Sequence 5, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106.574
; CURRENT FILING DATE: 2002-03-26

NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
LENGTH: 254
TYPE: PRT
ORGANISM: Murinae gen. sp.
US-10-106-574-5

Query Match 100.0%; Score 103; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
|||||
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 10
US-10-106-574-6
Sequence 6, Application US/10106574
Publication No. US20020164335A1
GENERAL INFORMATION:
APPLICANT: Harris, David A.
APPLICANT: Stewart, Richard S.
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
FILE REFERENCE: 09789280.0003
CURRENT APPLICATION NUMBER: US/10/106,574
CURRENT FILING DATE: 2002-03-26
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 6
LENGTH: 254
TYPE: PRT
ORGANISM: Murinae gen. sp.
US-10-106-574-6

Query Match 100.0%; Score 103; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
|||||
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 11
US-10-106-574-7
Sequence 7, Application US/10106574
Publication No. US20020164335A1
GENERAL INFORMATION:
APPLICANT: Harris, David A.
APPLICANT: Stewart, Richard S.
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
FILE REFERENCE: 09789280.0003
CURRENT APPLICATION NUMBER: US/10/106,574
CURRENT FILING DATE: 2002-03-26
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
LENGTH: 254
TYPE: PRT
ORGANISM: Murinae gen. sp.
US-10-106-574-7

Query Match 100.0%; Score 103; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
|||||
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 12
US-10-106-574-8
Sequence 8, Application US/10106574
Publication No. US20020164335A1
GENERAL INFORMATION:
APPLICANT: Harris, David A.
APPLICANT: Stewart, Richard S.
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
FILE REFERENCE: 09789280.0003
CURRENT APPLICATION NUMBER: US/10/106,574
CURRENT FILING DATE: 2002-03-26
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 8
LENGTH: 254
TYPE: PRT
ORGANISM: Murinae gen. sp.
US-10-106-574-8

Query Match 100.0%; Score 103; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
|||||
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 13
US-10-355-780-10
Sequence 10, Application US/10355780
Publication No. US20030143224A1
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Safar, Uiri
APPLICANT: Williamson, Anthony
APPLICANT: Burton, Dennis
TITLE OF INVENTION: Antibodies Specific for Ungulate PrP
FILE REFERENCE: UCAL-194
CURRENT APPLICATION NUMBER: US/10/355,780
CURRENT FILING DATE: 2003-01-30
PRIOR APPLICATION NUMBER: US/09/627,218B
PRIOR FILING DATE: 2000-07-27
NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 10
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-10-355-780-10

Query Match 100.0%; Score 103; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
|||||
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 14
US-10-304-630-20
Sequence 20, Application US/10304630
Publication No. US20030161836A1
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
FILE REFERENCE: ICOT/P219S2
CURRENT APPLICATION NUMBER: US/10/304,630
CURRENT FILING DATE: 2002-11-26
PRIOR APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02

; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus sp.
US-10-304-630-20

Query Match 100.0%; Score 103; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKNMERVVEQKCVTOYQ 20
|||
Db 199 ETDVKNMERVVEQKCVTOYQ 218

RESULT 15
US-10-304-630-21
; Sequence 21, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 21
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus sp.
US-10-304-630-21

Query Match 100.0%; Score 103; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKNMERVVEQKCVTOYQ 20
|||
Db 199 ETDVKNMERVVEQKCVTOYQ 218

Search completed: April 30, 2004, 15:35:04
Job time : 44.5833 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 29.4583 Seconds
(without alignments)
149.949 Million cell updates/sec

Title: US-09-603-832-6
Perfect score: 71
Sequence: 1 CWNITIKQTVTTT 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues
Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: SP archaea:*
2: SP bacteria:*
3: SP fungi:*
4: SP human:*
5: SP invertebrate:*
6: SP mammal:*
7: SP mnc:*
8: SP organelle:*
9: SP phage:*
10: SP plant:*
11: SP rodent:*
12: SP virus:*
13: SP vertebrate:*
14: SP unclassified:*
15: SP viirus:*
16: SP bacteriaph:*
17: SP archaeap:*

Pred. NO. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	60.5	85.2	212	11 Q811W5	Q811W5 cavia porce
2	60.5	85.2	220	6 Q866W7	Q866W7 obochona pr
3	60.5	85.2	238	4 Q86XR1	Q86XR1 homo sapien
4	60.5	85.2	240	11 Q8VHV4	Q8VHV4 microtus ag
5	60.5	85.2	243	11 P978S5	P978S5 mesocricetu
6	60.5	85.2	248	11 Q8VHV5	Q8VHV5 clethrionom
7	60.5	85.2	253	11 Q9Z0T5	Q9Z0T5 meriones un
8	60.5	85.2	254	6 Q866W8	Q866W8 rupara tana
9	60.5	85.2	254	11 Q8VHV6	Q8VHV6 apodemus sy
10	60.5	85.2	254	11 Q9Z0T4	Q9Z0T4 sigmodon fu
11	60.5	85.2	285	4 Q75942	Q75942 homo sapien
12	60	84.5	224	6 Q866U9	Q866U9 macrotscelid
13	59.5	83.8	181	6 Q97911	Q97911 budorcas ta
14	59.5	83.8	185	6 Q97694	Q97694 cervus nipp
15	59.5	83.8	195	6 Q97693	Q97693 canis lupus
16	59.5	83.8	195	6 Q97903	Q97903 addax nasom

17	59.5	83.8	197	11 Q811W6	Q811W6 sciurus vul
18	59.5	83.8	202	6 Q97696	Q97696 lama glama
19	59.5	83.8	202	6 Q97908	Q97908 capra nubia
20	59.5	83.8	204	6 Q97629	Q97629 odocoileus
21	59.5	83.8	204	6 Q9TS17	Q9TS17 odocoileus
22	59.5	83.8	204	6 Q9TS18	Q9TS18 odocoileus
23	59.5	83.8	209	6 Q9TV02	Q9TV02 camelus dro
24	59.5	83.8	211	6 Q77877	Q77877 antilocapra
25	59.5	83.8	212	6 Q97698	Q97698 cervus elap
26	59.5	83.8	213	6 Q9TV04	Q9TV04 canis famil
27	59.5	83.8	214	6 Q9TV03	Q9TV03 canis famil
28	59.5	83.8	215	11 Q811W3	Q811W3 spalax leuc
29	59.5	83.8	220	6 Q02825	Q02825 odocoileus
30	59.5	83.8	221	6 Q866V1	Q866V1 procavia ca
31	59.5	83.8	222	6 Q97913	Q97913 equus burch
32	59.5	83.8	222	6 Q866V5	Q866V5 hippopotamu
33	59.5	83.8	222	6 Q7YRX1	Q7YRX1 procyon lot
34	59.5	83.8	223	6 Q97910	Q97910 hippotragus
35	59.5	83.8	224	11 Q811W4	Q811W4 spalax leuc
36	59.5	83.8	226	6 Q97907	Q97907 gazella sub
37	59.5	83.8	226	6 Q866W5	Q866W5 erinaceus e
38	59.5	83.8	227	6 Q97964	Q97964 equus cabal
39	59.5	83.8	227	6 Q97906	Q97906 equus cabal
40	59.5	83.8	227	6 Q97909	Q97909 tragelaphus
41	59.5	83.8	235	6 Q97695	Q97695 giraffa cam
42	59.5	83.8	245	6 Q9MZU7	Q9MZU7 odocoileus
43	59.5	83.8	246	6 Q866W9	Q866W9 cynocephalu
44	59.5	83.8	247	6 Q866V7	Q866V7 equus cabal
45	59.5	83.8	247	11 Q811W7	Q811W7 sciurus vul

ALIGNMENTS

RESULT 1

ID Q811W5 PRELIMINARY; PRT; 212 AA.
AC Q811W5;
DT 01-JUN-2003 (TEMBLrel.. 24, Created)
DT 01-JUN-2003 (TEMBLrel.. 24, Last sequence update)
DT 01-OCT-2003 (TEMBLrel.. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Cavia porcellus (Guinea pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Hystriocognathi; Caviidae; Cavia.
OX NCBI_TaxID=10141;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22408137; PubMed=12519913;
RA van Rheede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.",
RL Mol. Biol. Evol. 20:111-121(2003).
DR EMBL; AY133039; AN16493.1; ..
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion.1.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PRO0341; PRION.
DR SMART; SMO0157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 1
SQ SEQUENCE 212 AA; 23265 MW; 8931918DBA5C44E5 CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 212;

Best Local Similarity 93.3%; Pred. No. 0.0078; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14
DB 145 CWNITIKQTVTTT 159

RESULT 2

ID Q866W7 PRELIMINARY; PRT; 220 AA.

AC Q866W7; 01-JUN-2003 (TREMBlrel. 24, Created)

DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)

DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)

DE Prion protein (Fragment).

GN PRNP.

OS Ochotona princeps (Southern American pika).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Lagomorpha; Ochotonidae; Ochotona.

OX NCBI_TaxID=9978;

RN [1]

RP SEQUENCE FROM N.A.

RA MEDLINE=2408137; PubMed=12519913;

RA van Rheebe T., Smolenaars M.M., Madsen O., De Jong W.W.;

RT "Molecular evolution of the mammalian prion protein."

RL Mol. Biol. Evol. 20:111-121(2003).

DR EMBL; AY133036; AAN16490.1; -

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR PRINTS; PR00341; PRION.

DR SMART; SM00157; PRP; 1.

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

FT NON_TER 1 220

FT NON_TER 1 220

SQ SEQUENCE 220 AA; 23872 MW; 5318CF0B39FB669 CRC64;

Query Match Best Local Similarity 85.2%; Score 60.5; DB 6; Length 220;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

DB 154 CWNITIKQHTVTTTT 168

RESULT 3

ID Q86XR1 PRELIMINARY; PRT; 238 AA.

AC Q86XR1; 01-JUN-2003 (TREMBlrel. 24, Created)

DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)

DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)

DE Prion protein (Fragment).

GN PRNP.

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Carnivora; Homiidae; Homo.

OX NCBI_TaxID=9606;

RN [1]

RP SEQUENCE FROM N.A.

RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;

RT "Polymorphisms of the prion protein gene in Korea."

RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.

DR EMBL; AY119882; AAO83635.1; -

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR PRINTS; PR00341; PRION.

DR SMART; SM00157; PRP; 1.

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

FT NON_TER 1 238

FT NON_TER 1 238

SQ SEQUENCE 238 AA; 26108 MW; ECGFA42623F3BBAE CRC64;

Query Match Best Local Similarity 85.2%; Score 60.5; DB 4; Length 238;

Best Local Similarity 93.3%; Pred. No. 0.0087;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

DB 164 CWNITIKQHTVTTTT 178

RESULT 4

ID Q8VHV4 PRELIMINARY; PRT; 240 AA.

AC Q8VHV4; 01-MAR-2002 (TREMBlrel. 20, Created)

DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)

DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)

DE Prion protein (Fragment).

GN PRP.

OS Microtus agrestis (Short-tailed field vole).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;

OX Microtus.

RN NCBI_TaxID=29092;

RP SEQUENCE FROM N.A.

RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.;

RT "Easy transmission of sheep scrapie to wild rodents questions the species barrier concept in the epidemiology of transmissible

RT spongiform encephalopathies."

RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF367625; AAL57232.1; -

DR HSP; P10279; IDWY.

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR PRINTS; PR00341; PRION.

DR SMART; SM00157; PRP; 1.

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

FT NON_TER 1 240

FT NON_TER 1 240

SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match Best Local Similarity 85.2%; Score 60.5; DB 11; Length 240;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

DB 171 CWNITIKQHTVTTTT 185

RESULT 5

ID P97895 PRELIMINARY; PRT; 243 AA.

AC P97895; 01-MAY-1997 (TREMBlrel. 03, Created)

DT 01-MAY-1997 (TREMBlrel. 03, Last sequence update)

DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)

DE Scrapie prion (PRP 27-30) (Fragment).

OS Mesocricetus auratus (Golden hamster).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;

OC Mesocricetus.

RN NCBI_TaxID=10036;

RP SEQUENCE FROM N.A.

RA MEDLINE=87108309; PubMed=3100471;

RA McKinley M.P., Prusiner S.B.;

RT "Biology and structure of scrapie prions."

RL Int. Rev. Neurobiol. 28:1-57(1986).

RN [2]

SQ SEQUENCE OF 79-223 FROM N.A.

RX MEDLINE=85176927; PubMed=2859120;
 RA Oesch B, Westaway D, Maechli M, McKinley M.P., Kent S.B.,
 RA Aebersold R.H., Barry R.A., Tempst P., Teplow D.B., Hood L.E.,
 RA Prusiner S.B., Weissmann C.;
 RT "A cellular gene encodes scrapie PrP 27-30 protein."
 RL Cell 40:735-746(1985).
 DR EMBL; M37381; AAA37090.1; -
 DR EMBL; K02234; AAA37093.1; -
 DR HSSP; P04273; 1B10.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON TER
 SQ SEQUENCE 243 AA; 26643 MW; 4F53612BBFF240F9 CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 243;
 Best Local Similarity 93.3%; Pred. No. 0.0089;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
 DB 168 CWNITIKOHTVTTTT 182

RESULT 6
 Q8VHV5 PRELIMINARY; PRT; 248 AA.
 ID Q8VHV5;
 AC Q8VHV5;
 DT 01-MAR-2002 (TREMBlrel. 20, Created)
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Clethrionomys glareolus (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Clethrionomys;
 CC Clethrionomys;
 CX NCBI_TaxID=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Mindl O., Vaccari G., Nomo R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Ipp H.P.;
 RT "Easy transmission of sheep scrapie to wild rodents questions the
 RT species barrier concept in the epidemiology of transmissible
 RT spore-forming encephalopathies."
 RL Submitted (Apr-2001) to the EMBL/Genbank/DBJ databases.
 DR EMBL; AF367624; AAL57231.1; -
 DR HSSP; P10279; 1DWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON TER
 SQ SEQUENCE 248 AA; 27259 MW; 815E64ECD2773C2C CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 248;
 Best Local Similarity 93.3%; Pred. No. 0.0091;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
 DB 179 CWNITIKOHTVTTTT 193

RESULT 7

Q9Z0T5
 ID Q9Z0T5 PRELIMINARY; PRT; 253 AA.
 AC Q9Z0T5;
 DT 01-MAY-1999 (TREMBlrel. 10, Created)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
 OC Meriones.
 CC Meriones.
 CX NCBI_TaxID=10047;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Tissue=Brain;
 RX MEDLINE=93033687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Scharzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 RT of flexible regions of the prion protein."
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF117314; AAD19985.1; -
 DR HSSP; P04925; 1AC2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON TER
 SQ SEQUENCE 253 AA; 27747 MW; B44D16667A97307F CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 253;
 Best Local Similarity 93.3%; Pred. No. 0.0093;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
 DB 178 CWNITIKOHTVTTTT 192

RESULT 8
 Q866W8 PRELIMINARY; PRT; 254 AA.
 ID Q866W8;
 AC Q866W8;
 DT 01-JUN-2003 (TREMBlrel. 24, Created)
 DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
 DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRNP.
 OS Tupia tana (large tree shrew).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Scandentia; Tupaiidae; Tupia.
 CC Mammalia;
 CX NCBI_TaxID=70687;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=22408137; PubMed=12519913;
 RA van Rheede T., Smolenaars W.M., Madsen O., De Jong W.W.;
 RT "Molecular evolution of the mammalian prion protein."
 RL Mol. Biol. Evol. 20:111-121(2003).
 DR EMBL; AY133035; AAN16489.1; -
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON TER
 SQ SEQUENCE 254 AA; 27540 MW; 73F2944908135183 CRC64;

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QY      1  CWNITIKQ-TVTTTT 14
      |||||
DB      189  CWNITIKQHTVTTTT 203

RESULT 9
08VHV6
ID      08VHV6      PRELIMINARY;      PRT;      254 AA.
AC      08VHV6;
DT      01-MAR-2002 (TREMBLrel. 20, Created)
DT      01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT      01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE      Prion protein.
GN
OS      Apodemus sylvaticus (European woodmouse).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
OC      Apodemus.
OK      NCBI_TaxID=10129;
RN      [1]
RP      SEQUENCE FROM N.A.
RA      Dell'Ono G., Agrimi U., Di Bari M., Windi O., Vaccari G., Nono R.,
RA      Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
RT      "Easy transmission of sheep scrapie to wild rodents questions the
RT      species barrier concept in the epidemiology of transmissible
RT      prioniform encephalopathies.";
RL      Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.
DR      EMBL: AF367623; AAL57230.1; -
DR      HSRP; P10279; IDWY.
DR      InterPro; IPR000817; Prion.
DR      Pfam; PF00377; Prion.1.
DR      Pfam; PF03991; Prion.octapep; 6.
DR      PRINTS; PR00341; PRION.
DR      SMART; SM00157; PRP; 1.
DR      PROSITE; PS00291; PRION_1; 1.
DR      PROSITE; PS00706; PRION_2; 1.
SQ      SEQUENCE      254 AA; 27857 MW;      CB2E5658C47A8885 CRC64;

Query Match      85.2%;      Score 60.5;      DB 11;      Length 254;
Best Local Similarity      93.3%;      Pred. No. 0.0093;
Matches      14;      Conservative      0;      Mismatches      0;      Indels      1;      Gaps      1.

QY      1  CWNITIKQ-TVTTTT 14
      |||||
DB      179  CWNITIKQHTVTTTT 193

RESULT 10
09ZOT4
ID      09ZOT4      PRELIMINARY;      PRT;      254 AA.
AC      09ZOT4;
DT      01-MAY-1999 (TREMBLrel. 10, Created)
DT      01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT      01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE      Prion protein (Fragment).
GN      PRP.
OS      Sigmodon fulviventer (tawny-bellied cotton rat).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC      Sigmodon.
OK      NCBI_TaxID=89246;
RN      [1]
RP      SEQUENCE FROM N.A.
RA      TISSUE=Brain;
RX      MEDLINE=99303687; PubMed=10373359;
RA      Wopner F., Weidenhofer G., Schneider R., von Brunn A., Glöck S.,
RA      Schwarz T.F., Werner T., Scharf H.M.;
RT      "Analysis of 27 mammalian and 9 avian Prs reveals high conservation

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RT      J Mol. Biol. 289:1163-1176(1999).
DR      EMBL; AF117334; AAD19995.1; -.
DR      HSSP; P04925; 1AG2.
DR      InterPro; IPR000817; Prion.
DR      Pfam; PF00377; Prion; 1.
DR      Pfam; PF03991; Prion_octapep; 6.
DR      PRINTS; PR00341; PRION.
DR      SMART; SM00157; PRP; 1.
DR      PROSITE; PS00291; PRION_1; 1.
DR      PROSITE; PS00706; PRION_2; 1.
DR      NON_TER 254 254
SQ      SEQUENCE 254 AA; 27904 MW; 9EE7E1D106543B97 CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 254;
Best Local Similarity 93.3%; Pred. No. 0.0093;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY      1 CWNITIKQ-TYTTT 14
      |||||
DB      179 CWNITIKQHTYTTT 193

RESULT 11
075942 PRELIMINARY; PRT; 285 AA.
ID 075942
AC 075942;
DT 01-NOV-1998 (TRENBLREL. 08, Created)
DT 01-MAR-2001 (TRENBLREL. 15, Last sequence update)
DT 01-JUN-2003 (TRENBLREL. 24, Last annotation update)
DE Prion protein.
GN PRNP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
CX NCBI_Taxid=9606;
[1]
RP SEQUENCE FROM N.A.
RA Cervenakova U., Halperin J.J., Stone G., Teller I., Gibbs C.J. Jr.;
RT "A new Creutzfeldt-Jakob disease family with 96bp insertion mutation
RL submitted (NCV-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF085477; AAC62750.2; -.
DR HSSP; P04156; 1OLZ.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 10.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
SQ SEQUENCE 285 AA; 30769 MW; C14244BB1183F653 CRC64;

Query Match 85.2%; Score 60.5; DB 4; Length 285;
Best Local Similarity 93.3%; Pred. No. 0.01;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY      1 CWNITIKQ-TYTTT 14
      |||||
DB      211 CWNITIKQHTYTTT 225

RESULT 12
086609 PRELIMINARY; PRT; 224 AA.
ID 086609
AC 086609;
DT 01-JUN-2003 (TRENBLREL. 24, Created)
DT 01-JUN-2003 (TRENBLREL. 24, Last sequence update)
DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Macroselidus proboscideus (Short-eared elephant shrew).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

```

OC Mammalia; Eutheria; Macroscelidea; Macroscelididae; Macroscelides.
 OK NCBI_TaxID=29082;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=22408137; PubMed=12519913;
 RA van Rieede T., Smolenaars M.W., Madsen O., De Jong W.W.;
 RT "Molecular evolution of the mammalian prion protein.";
 RL Mol. Biol. Evol. 20:111-121(2003).
 DR EMBL; AY13059; AAN16513.1;
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 224 224
 SQ SEQUENCE 224 AA; 23856 MW; 52C11DC1286F849B CRC64;

Query Match 84.5%; Score 60; DB 6; Length 224;
 Best Local Similarity 85.7%; Pred. No. 0.01;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 CVNITIKQTVTTT 14
 |||||
 DB 159 CVNITIKQHTTTT 172

RESULT 13

097911 PRELIMINARY; PRT; 181 AA.
 AC 097911;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Budorcas taxicolor (taklin).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 CC Bovidae; Caprinae; Budorcas.
 OK NCBI_TaxID=37181;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Peripheral blood leukocytes;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Scharzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF117326; AAD1997.1; -.
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 FT NON_TER 1 1
 FT NON_TER 181 181
 SQ SEQUENCE 181 AA; 19253 MW; A9001D08642E92A CRC64;

Query Match 83.8%; Score 59.5; DB 6; Length 181;
 Best Local Similarity 86.7%; Pred. No. 0.01;
 Matches 13; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Oy 1 CVNITIKQTVTTT 14
 |||||
 DB 155 CVNITIKQHTTTT 169

RESULT 14

097694 PRELIMINARY; PRT; 185 AA.
 AC 097694;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Cervus nippon dybowskii.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
 CC Cervidae; Cervinae; Cervus.
 OK NCBI_TaxID=88066;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=9717556; PubMed=9174569;
 RA Scharzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;
 RT "Is codon 129 of prion protein polymorphic in human beings but not in
 animals?"
 RL Lancet 349:1603-1604(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Scharzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF119941; AAD13285.1; -.
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 FT NON_TER 1 1
 FT NON_TER 185 185
 SQ SEQUENCE 185 AA; 19870 MW; BB87C7658BC66E79 CRC64;

Query Match 83.8%; Score 59.5; DB 6; Length 185;
 Best Local Similarity 86.7%; Pred. No. 0.01;
 Matches 13; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Oy 1 CVNITIKQTVTTT 14
 |||||
 DB 158 CVNITIKQHTTTT 172

RESULT 15

097693 PRELIMINARY; PRT; 195 AA.
 AC 097693;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Canis lupus (Gray wolf).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
 OK NCBI_TaxID=9612;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Scharzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF119939; AAD12063.1; -.
 DR HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.

DR SWART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON TER 1
 FT NON TER 195
 SQ SEQUENCE 195 AA; 21097 MW; 9D18E4EB9AA5D031 CRC64;

Query Match 83.8%; Score 59.5; DB 6; Length 195;
 Best Local Similarity 86.7%; Pred. No. 0.011;
 Matches 13; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Oy 1 CNIITIKO-TVTTT 14
 |||||:
 Db 142 CNIITVKKHTVTTT 156

Search completed: April 30, 2004, 15:31:22
 Job time : 30.4583 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:25:13 ; Search time 6.70833 Seconds
(without alignments)
108,668 Million cell updates/sec

Title: US-09-603-832-6
Sequence: 1 CVNITIKQVTTT 14

Scoring table: ELOSUM62
Gapop 10.0, Gapext 0.5

Searched: 141681 seqs, 52070155 residues
Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: SwissProt_42.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	60.5	85.2	232 1	P40246 atelae geof
2	60.5	85.2	238 1	P40246 atelae geof
3	60.5	85.2	238 1	P40246 atelae geof
4	60.5	85.2	239 1	P40246 atelae geof
5	60.5	85.2	241 1	P40246 atelae geof
6	60.5	85.2	241 1	P40246 atelae geof
7	60.5	85.2	245 1	P40250 ceropithe
8	60.5	85.2	246 1	P40250 ceropithe
9	60.5	85.2	246 1	P40250 ceropithe
10	60.5	85.2	246 1	P40250 ceropithe
11	60.5	85.2	252 1	P40250 ceropithe
12	60.5	85.2	252 1	P40250 ceropithe
13	60.5	85.2	252 1	P40250 ceropithe
14	60.5	85.2	253 1	P40250 ceropithe
15	60.5	85.2	253 1	P40250 ceropithe
16	60.5	85.2	253 1	P40250 ceropithe
17	60.5	85.2	253 1	P40250 ceropithe
18	60.5	85.2	253 1	P40250 ceropithe
19	60.5	85.2	253 1	P40250 ceropithe
20	60.5	85.2	253 1	P40250 ceropithe
21	60.5	85.2	254 1	P40250 ceropithe
22	60.5	85.2	254 1	P40250 ceropithe
23	60.5	85.2	254 1	P40250 ceropithe
24	60.5	85.2	254 1	P40250 ceropithe
25	60.5	85.2	254 1	P40250 ceropithe
26	60.5	85.2	254 1	P40250 ceropithe
27	60.5	85.2	254 1	P40250 ceropithe
28	60.5	85.2	255 1	P40250 ceropithe
29	60.5	85.2	255 1	P40250 ceropithe
30	60.5	85.2	256 1	P40250 ceropithe
31	60.5	85.2	256 1	P40250 ceropithe
32	60.5	85.2	256 1	P40250 ceropithe
33	60.5	85.2	256 1	P40250 ceropithe

ALIGNMENTS

RESULT 1	ID	PRIOR_ATEGE	STANDARD	PRT	232 AA
AC	P40246	01-FEB-1995 (Rel. 31, Created)			
DT	01-FEB-1995 (Rel. 31, Last sequence update)				
DT	15-MAR-2004 (Rel. 43, Last annotation update)				
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).				
GN	PrP.				
OS	Atelae geoffroyi (Black-handed spider monkey).				
OC	Bukariyola, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.				
OX	NCBI_TaxID=9509;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=95139065; PubMed=7837269;				
RA	Schätzl H.M., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.;				
RL	J. Mol. Biol. 245:362-374(1995).				
CC	-1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.				
CC	-1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "rod".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CRUZFELD-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: Belongs to the prion family.				
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL Outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.jsb-sib.ch/announce/ or send an email to license@lsb-sib.ch).				
CC	EMBL: U08309; AAC50097.1; -				
CC	PIR: S71041; S71041.				
CC	HSSP: P04156; IEIG.				
CC	InterPro: IPR000817; Prion.				
CC	Pfam: PF00377; Prion; 1.				
CC	Pfam: PF03991; PrionOctapep; 5.				
CC	PRINTS: PR00341; Prion.				
CC	SMART: SM00157; PrP; 1.				
CC	PROSITE: PS00291; PRION 1; 1.				
CC	PROSITE: PS00706; PRION 2; 1.				
CC	Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.				
CC	NON TER				
CC	SIGNAL				
CC	CHAIN				
CC	PROPEP				
CC	LIPID				

BY SIMILARITY
MAJOR PRION PROTEIN.
REMOVED IN MAJOR FORM (BY SIMILARITY).
GPI-anchor amidated serine (By similarity).

FT DISULFID 163 198 BY SIMILARITY
 FT CARBOHYD 165 165 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 181 165 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DOMAIN 44 84 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 Q.
 FT REPEAT 44 51 1.
 FT REPEAT 52 59 2.
 FT REPEAT 60 67 3.
 FT REPEAT 68 75 4.
 FT NON_TER 232 232
 SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05C64A CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 232;
 Best Local Similarity 93.3%; Pred. No. 0.00095;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 DB 163 CWNITIKQTVTTTT 177

RESULT 2

PRIO_CERAT STANDARD; PRT; 238 AA.

AC Q95145; Q95200;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus aethiops, and
 OS Macaca sylvanus (Barbary ape).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_TaxID=36222, 9546;
 RN [1]

RP SEQUENCE FROM N.A.

RA der Kuyt A.C., Dekker J.T., Goudemits J.;
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U75384; AAB50623.1; -
 DR EMBL; U75382; AAB50629.1; -

DR HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 5.

DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.

DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.

DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 KW NON_TER 1 15 BY SIMILARITY.

FT SIGNAL <1 15

FT CHAIN 16 215 MAJOR PRION PROTEIN.
 FT PROPEP 216 238 REMOVED IN MATURE FORM (BY SIMILARITY).
 FT LIPID 215 215 GPI-anchor amidated serine (By
 FT similarity).
 FT DISULFID 164 199 BY SIMILARITY.
 FT CARBOHYD 166 166 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DOMAIN 44 76 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT NON_TER 238 AA; 26123 MW; 5F59A3BEC3B531B CRC64;
 SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3B531B CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 238;
 Best Local Similarity 93.3%; Pred. No. 0.00097;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 DB 164 CWNITIKQTVTTTT 178

RESULT 3

PRIO_THERG STANDARD; PRT; 238 AA.

AC Q95270;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C) (Fragment).
 GN PRNP OR PRP.
 OS Theropithecus gelada (Gelada baboon).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Theropithecus.
 NCBI_TaxID=9565;
 RN [1]

RP SEQUENCE FROM N.A.

RA der Kuyt A.C., Dekker J.T., Goudemits J.;
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U75383; AAB50630.1; -
 DR HSSP; P04925; IAG2.

DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.

DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.

DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.
 DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal.

KW NON_TER 1 15

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FT SIGNAL <1 15 BY SIMILARITY.
FT CHAIN 16 >238 MAJOR PRION PROTEIN.
FT DISULFID 164 199 BY SIMILARITY.
FT CARBOHYD 166 166 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT NON TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF60243EDB CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 238;
Best Local Similarity 93.3%; Pred. No. 0.00097;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 CWNITIKQ-TVTTTT 14
Db 164 CWNITIKQHTVTTTT 178

RESULT 4
PRIO_AOTTR STANDARD; PRT; 239 AA.
ID PRIO_AOTTR
AC P40245;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Aotus trivirgatus (Night monkey) (Doutroucouli).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.
OC NCBI_TaxID=9505;
RN [1]
RP MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL; U08293; AAC50082.1; -
CC PIR; S53633; S53633.
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF03991; Prion_octapep; 6.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; Prp; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal.

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FT NON TER 1 1
FT SIGNAL <1 15 BY SIMILARITY.
FT CHAIN 16 >239 MAJOR PRION PROTEIN.
FT DISULFID 171 206 BY SIMILARITY.
FT CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 83 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 44 51 1.
FT REPEAT 52 59 2.
FT REPEAT 60 67 3.
FT REPEAT 68 75 4.
FT REPEAT 76 83 5.
FT NON TER 239 239
SQ SEQUENCE 239 AA; 26246 MW; 2EFB77E354B7024A CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 239;
Best Local Similarity 93.3%; Pred. No. 0.00098;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 CWNITIKQ-TVTTTT 14
Db 171 CWNITIKQHTVTTTT 185

RESULT 5
PRIO_CALMO STANDARD; PRT; 241 AA.
ID PRIO_CALMO
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Callipeba moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callipecinae;
OC Callipeba.
OC NCBI_TaxID=9523;
RN [1]
RP MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL; U08312; AAC50100.1; -
CC PIR; S71048; S71048.
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF03991; Prion_octapep; 6.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; Prp; 1.

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DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT NON_TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 >241
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;
 Query Match 85.2%; Score 60.5; DB 1; Length 241;
 Best Local Similarity 93.3%; Pred. No. 0.00099;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 QY 1 CWNITIKO-TVTTTT 14
 DB 172 CWNITIKOHTVTTTT 186
 RESULT 6
 PRIO_MANSF STANDARD; PRT; 241 AA.
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN PRNP
 OS Mandillus sphinx (Mandril) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandillus.
 OX NCBI_TaxID=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."; J. Mol. Biol. 245:362-374(1995).
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
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 CC EMBL; J08303; AAC50091.1; -
 CC PIR; S71056; S71056.
 CC HSSP; P04925; IAC3.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.

DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 FT NON_TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 >241
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;
 Query Match 85.2%; Score 60.5; DB 1; Length 241;
 Best Local Similarity 93.3%; Pred. No. 0.00099;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 QY 1 CWNITIKO-TVTTTT 14
 DB 172 CWNITIKOHTVTTTT 186
 RESULT 7
 PRIO_CERAE STANDARD; PRT; 245 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN PRNP
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=9534, 36224;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."; J. Mol. Biol. 245:362-374(1995).
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL; U08291; AAC5080.1; -
 CC EMBL; U08292; AAC5081.1; -
 CC PIR; S53627; S53627.
 CC PIR; S71045; S71045.
 CC HSSP; P04925; IAG2.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC Pfam; PF03991; Prion; octapep; 5.
 CC PRINTS; PR00341; PRION.
 CC SMART; SM00157; PRP; 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 CC SIGNAL 1 22 BY SIMILARITY.
 CC CHAIN 23 222 MAJOR PRION PROTEIN.
 CC PROPEP 223 245 REMOVED IN MATURE FORM (BY SIMILARITY).
 CC LIPID 222 222 GPI-anchor amidated serine (By similarity).
 CC DISULFID 173 206 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC DOMAIN 51 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-Q.
 CC REPEAT 51 59 1.
 CC REPEAT 60 67 2.
 CC REPEAT 68 75 3.
 CC REPEAT 76 83 4.
 CC SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 245;
 Best Local Similarity 93.3%; Pred. No. 0.001;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKO-TVTTTT 14
 Db 171 CWNITIKOHTVTTTT 185

RESULT 8
 PRIO_CERMO STANDARD; PRT; 246 AA.
 ID PRIO_CERMO
 AC Q95172; Q95173;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus mona, and
 OS Cercopithecus neglectus.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 CC NCBI_TaxID=36226; 36227;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL; U75386; AAB50625.1; -
 CC EMBL; U75387; AAB50626.1; -
 CC HSSP; P04925; IAG2.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; prion; 1.
 CC Pfam; PF03991; Prion; octapep; 6.
 CC PRINTS; PR00341; PRION.
 CC SMART; SM00157; PRP; 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 CC KW Prion; 1
 CC NON_TER 1 15
 CC SIGNAL <1 15
 CC CHAIN 16 223 MAJOR PRION PROTEIN.
 CC PROPEP 224 246 REMOVED IN MATURE FORM (BY SIMILARITY).
 CC LIPID 223 223 GPI-anchor amidated serine (By similarity).
 CC DISULFID 172 207 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-Q.
 CC REPEAT 44 52 1.
 CC REPEAT 53 60 2.
 CC REPEAT 61 76 3.
 CC REPEAT 69 76 4.
 CC REPEAT 77 84 5.
 CC SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 246;
 Best Local Similarity 93.3%; Pred. No. 0.001;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKO-TVTTTT 14
 Db 172 CWNITIKOHTVTTTT 186

RESULT 9
 PRIO_CERPA STANDARD; PRT; 246 AA.
 ID PRIO_CERPA
 AC Q95174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus parus.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 CC NCBI_TaxID=27677;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.

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CC or send an email to license@sib-sib.ch).
CC -----
CC DR EMBL; U75388; AAB50627.1; -.
CC DR HSSP; P04925; IAG2.
CC DR InterPro; IPR000817; Prion.
CC DR Pfam; PF00377; prion.1.
CC DR Pfam; PF03991; Prion.octapep; 6.
CC DR PRINTS; PR00341; PRION.
CC DR SMART; SM00157; PRP; 1.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC FT NON_TER 1 1
CC FT SIGNAL 1 15
CC FT CHAIN 16 223
CC FT PROPEP 224 246
CC FT LIPID 223 223
CC FT DISULFID 172 207
CC FT CARBOHYD 174 174
CC FT CARBOHYD 190 190
CC FT DOMAIN 44 84
CC FT REPEAT 44 52
CC FT REPEAT 53 60
CC FT REPEAT 61 68
CC FT REPEAT 69 76
CC FT REPEAT 77 84
CC FT REPEAT 77 84
CC SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
CC
CC Query Match 85.2%; Score 60.5; DB 1; Length 246;
CC Best Local Similarity 93.3%; Pred. No. 0.001;
CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC
CC QY 1 CWNITIKQ-TVTTTT 14
CC Db 172 CWNITIKQHTVTTTT 186
CC
CC RESULT 10
CC PRIO_CERTO STANDARD; PRT; 246 AA.
CC ID PRIO_CERTO
CC AC 095176;
CC DT 01-NOV-1997 (Rel. 35, Created)
CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Major prion protein precursor (Prp) (PrP27-30) (P-PrP3-35C) (Fragment).
CC GN PRNP.
CC OS Cercopithecus torquatus alys (Red-crowned mangabey) (Sooty mangabey).
CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC OC Cercopithecinae; Cercopithecus.
CC NCBI_TaxID=9531;
CC OX [1]
CC RN SEQUENCE FROM N.A.
CC RA der Kuyil A.C., Dekker J.T., Goudarzi J.;
CC RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

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CC CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC CC -1- SIMILARITY: Belongs to the prion family.
CC CC -----
CC CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC or send an email to license@sib-sib.ch).
CC -----
CC DR EMBL; U75385; AAB50628.1; -.
CC DR HSSP; P04925; IAG2.
CC DR InterPro; IPR000817; Prion.
CC DR Pfam; PF00377; prion.1.
CC DR Pfam; PF03991; Prion.octapep; 6.
CC DR PRINTS; PR00341; PRION.
CC DR SMART; SM00157; PRP; 1.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC FT NON_TER 1 1
CC FT SIGNAL 1 15
CC FT CHAIN 16 223
CC FT PROPEP 224 246
CC FT LIPID 223 223
CC FT DISULFID 172 207
CC FT CARBOHYD 174 174
CC FT CARBOHYD 190 190
CC FT DOMAIN 44 84
CC FT REPEAT 44 52
CC FT REPEAT 53 60
CC FT REPEAT 61 68
CC FT REPEAT 69 76
CC FT REPEAT 77 84
CC FT REPEAT 77 84
CC SQ SEQUENCE 246 AA; 26914 MW; F58679CBBEC5ADCT CRC64;
CC
CC Query Match 85.2%; Score 60.5; DB 1; Length 246;
CC Best Local Similarity 93.3%; Pred. No. 0.001;
CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC
CC QY 1 CWNITIKQ-TVTTTT 14
CC Db 172 CWNITIKQHTVTTTT 186
CC
CC RESULT 11
CC PRIO_ATEPA STANDARD; PRT; 252 AA.
CC ID PRIO_ATEPA
CC AC P51446;
CC DT 01-OCT-1996 (Rel. 34, Created)
CC DT 01-OCT-1996 (Rel. 34, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
CC GN PRNP.
CC OS Ateles paniscus (Black spider monkey).
CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
CC NCBI_TaxID=9510;
CC OX [1]
CC RN SEQUENCE FROM N.A.
CC RA TISSUE=Brain;
CC RX MEDLINE=95083661; PubMed=7991600;
CC RA Cervanekova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,
CC RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;
CC RT "Infectious amyloid precursor gene sequences in primates used for
CC RT experimental transmission of human spongiform encephalopathy.";
CC RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
CC CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

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CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CRUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC DR EMBL: U0164; AAA68634.1; -.
CC DR HSSP: P04156; 1E1G.
CC -----
CC DR InterPro: IPR000817; Prion.
CC DR Pfam: PF00377; prion; 1.
CC DR PRINTS: PR03991; Prion; Octapep; 6.
CC DR SMART: SMO0157; PRP; 1.
CC DR PROSITE: PS00291; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC KW SIGNAL 1 22
CC CHAIN 23 229
CC PROPEP 230 252
CC LIPID 229 229
CC -----
CC FT DISULFID 178 213
CC FT CARBOHYD 180 196
CC FT CARBOHYD 156 180
CC FT DOMAIN 51 90
CC FT REPEAT 51 58
CC FT REPEAT 59 66
CC FT REPEAT 67 74
CC FT REPEAT 75 82
CC FT REPEAT 83 90
CC FT REPEAT 83 90
CC SQ SEQUENCE 252 AA; 27718 MW; 20EA38A42DCC56D1 CRC64;
CC -----
CC Query Match 85.2%; Score 60.5; DB 1; Length 252;
CC Best Local Similarity 93.3%; Pred. No. 0.001;
CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC -----
CC QY 1 CWNITIKQ-TVTTTT 14
CC Db 178 CWNITIKQHTVTTTT 192
CC -----
CC RESULT 12
CC PRIO_CALJA STANDARD; PRT; 252 AA.
CC ID P40247;
CC DT 01-FEB-1995 (Rel. 31, Created)
CC DT 01-FEB-1995 (Rel. 31, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
CC GN PRNP.
CC OS Callithrix jacchus (Common marmoset).
CC OC Mammalia; Chordata; Craniata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae;
CC OC Callitrich.
CC OK NCBI_TaxID=9483;
CC RN [1]
CC RX SEQUENCE FROM N.A.
CC RA MEDLINE=95139066; PubMed=7837269;
CC RT "Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
CC J. Mol. Biol. 245:362-374(1995)."

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CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CRUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
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CC or send an email to license@isb-sib.ch).
CC -----
CC DR EMBL: U08304; AAC50092.1; -.
CC DR PIR: S53634; S53634.
CC DR HSSP: P04925; 1AG2.
CC DR InterPro: IPR000817; Prion.
CC DR Pfam: PF00377; prion; 1.
CC DR PRINTS: PR03991; Prion; Octapep; 6.
CC DR SMART: SMO0157; PRP; 1.
CC DR PROSITE: PS00291; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC FT SIGNAL 1 22
CC FT CHAIN 23 229
CC FT PROPEP 230 252
CC FT LIPID 229 229
CC -----
CC FT DISULFID 178 213
CC FT CARBOHYD 180 180
CC FT CARBOHYD 156 180
CC FT DOMAIN 51 90
CC FT REPEAT 51 58
CC FT REPEAT 59 66
CC FT REPEAT 67 74
CC FT REPEAT 75 82
CC FT REPEAT 83 90
CC FT REPEAT 83 90
CC SQ SEQUENCE 252 AA; 27639 MW; B2800B60FD5C3664 CRC64;
CC -----
CC Query Match 85.2%; Score 60.5; DB 1; Length 252;
CC Best Local Similarity 93.3%; Pred. No. 0.001;
CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC -----
CC QY 1 CWNITIKQ-TVTTTT 14
CC Db 178 CWNITIKQHTVTTTT 192
CC -----
CC RESULT 13
CC PRIO_CEBAP STANDARD; PRT; 252 AA.
CC ID P40249;
CC DT 01-FEB-1995 (Rel. 31, Created)
CC DT 01-FEB-1995 (Rel. 31, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
CC GN PRNP.
CC OS Cebus apella (Brown-capped capuchin).
CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
CC OK NCBI_TaxID=9515;
CC RN [1]
CC RX SEQUENCE FROM N.A.
CC RA MEDLINE=95139066; PubMed=7837269;

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RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
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 CC -----
 CC EMBL: U08295; AAC50084.1; -
 CC PIR: S53631; S53631.
 CC HSSP: P04156; 1B1G.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; prion; 1.
 CC PRINTS: PR00341; Prion.
 CC SMART: SMO0157; PrP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 CC SIGNAL 1 22
 CC CHAIN 23 229
 CC PROPEP 230 222
 CC LIPID 229 229
 CC -----
 CC DISULFID 178 213
 CC CARBOHYD 180 190
 CC CARBOHYD 181 197
 CC DOMAIN 51 90
 CC FT REPEAT 51 58
 CC FT REPEAT 59 66
 CC FT REPEAT 67 74
 CC FT REPEAT 75 82
 CC FT REPEAT 83 90
 CC FT REPEAT 84 91
 CC FT REPEAT 91 91
 CC SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;
 Query Match 85.2%; Score 60.5; DB 1; Length 252;
 Best Local Similarity 93.3%; Pred. No. 0.001; 0; Mismatches 1; Gaps 1;
 Matches 14; Conservative 0; Indels 1; Gaps 1;
 QY 1 CVAITIKQ-TVTTTT 14
 DB 178 CVAITIKQHTVTTTT 192
 RESULT 14
 PRO_COLLU STANDARD; PRT; 253 AA.
 AC P40251;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN PRNP.
 OS Colobus guereza (Black-and-white colobus monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Colobinae;
 OC Colobus.

OX NCBI_TaxID=33548;
 RN [1]
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC [2]
 CC SEQUENCE OF 8-253 FROM N.A.
 CC der Kuyil A.C., Dekker J.T., Gouldsmi J.;
 CC Submitted (OCT-1996) to the EMBL/Genbank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U08297; AAC50086.1; -
 CC EMBL: U75388; AAB50624.1; -
 CC PIR: S53618; S53618.
 CC HSSP: P04925; 1AG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; prion; 1.
 CC PRINTS: PR00341; Prion.
 CC SMART: SMO0157; PrP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 CC SIGNAL 1 22
 CC CHAIN 23 230
 CC PROPEP 231 253
 CC LIPID 230 230
 CC -----
 CC DISULFID 179 214
 CC CARBOHYD 181 181
 CC CARBOHYD 197 197
 CC DOMAIN 51 91
 CC FT REPEAT 51 59
 CC FT REPEAT 60 67
 CC FT REPEAT 68 75
 CC FT REPEAT 76 83
 CC FT REPEAT 84 91
 CC FT REPEAT 91 91
 CC SEQUENCE 253 AA; 27626 MW; 14B17477881F5316 CRC64;
 Query Match 85.2%; Score 60.5; DB 1; Length 253;
 Best Local Similarity 93.3%; Pred. No. 0.001; 0; Mismatches 1; Gaps 1;
 Matches 14; Conservative 0; Indels 1; Gaps 1;
 QY 1 CVAITIKQ-TVTTTT 14
 DB 179 CVAITIKQHTVTTTT 193
 RESULT 15
 PRO_COLLU STANDARD; PRT; 253 AA.
 AC P40252; Q28419;

DT 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 15-MAR-2004 (Rel. 43, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (P-P33-35C).

GN PRNP.

OS Gorilla gorilla gorilla (lowland gorilla).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Gorilla.

OX NCBI_TaxID=9595;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RL J. Mol. Biol. 245:362-374(1995).

CC [2]

CC SEQUENCE FROM N.A.

CC TISSUE=Blood;

CC MEDLINE=95083661; PubMed=7991600;

CC Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K., Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;

CC "Infectious amyloid precursor gene sequences in primates used for experimental transmission of human spongiform encephalopathy.";

CC Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).

CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.

CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "rods".

CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -!- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CRETZFEJDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -!- SIMILARITY: Belongs to the prion family.

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CC -----

DR EMBL, U08300; AAC50089.1; -;

DR EMBL, U05166; AAA68633.1; -;

DR PIR, I37032; I37032.

DR PIR, S53614; S53614.

DR HSSP, P04156; IOLZ.

DR InterPro, IPR000817; Prion.

DR Pfam, PF00377; prion; 1.

DR Pfam, PF03991; Prion octapep; 6.

DR PRINTS, PR00341; PRION.

DR SMART, SMC0157; PrP; 1.

DR PROSITE, PS00291; PRION_1; 1.

DR PROSITE, PS00706; PRION_2; 1.

KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.

FT SIGNAL 1 22

FT CHAIN 23 230

FT PROPEP 231 253

FT LIPID 230 230

FT

FT DISULFID 179 214

FT CARBOHYD 181 181

FT CARBOHYD 197 197

FT DOMAIN 51 91

FT

FT REPEAT 51 59

FT REPEAT 60 67

FT REPEAT 68 75

FT REPEAT 76 83

FT REPEAT 84 91

FT CONFLICT 6 6

C -> Y (IN REF. 2).

SQ SEQUENCE 253 AA; 27660 MW; E28F4C3FAABCA49E CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 253;

Best Local Similarity 93.3%; Pred. No. 0.001; Indels 1; Gaps 1;

Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTT 14

DB 179 CWNITIKQHTVTTT 193

Search completed: April 30, 2004, 15:29:28

Job time: 7.70833 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 10.2083 Seconds
(without alignments) 131.920 Million cell updates/sec

Title: US-09-603-832-6
Perfect score: 71
Sequence: 1 CWNITIKQHTVTTT 14

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database :

1: PIR.78:*
2: PIR1:*
3: PIR3:*
4: PIR4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	226	A53892	major prion-related prot
2	60.5	85.2	232	S71041	major prion-related prot
3	60.5	85.2	239	S53633	major prion-related prot
4	60.5	85.2	241	S71056	major prion-related prot
5	60.5	85.2	241	S71048	major prion-related prot
6	60.5	85.2	245	S53627	major prion-related prot
7	60.5	85.2	245	S71045	major prion-related prot
8	60.5	85.2	252	S53634	major prion-related prot
9	60.5	85.2	252	S53631	major prion-related prot
10	60.5	85.2	253	U7H1	major prion-related prot
11	60.5	85.2	253	S71032	major prion-related prot
12	60.5	85.2	253	S53635	major prion-related prot
13	60.5	85.2	253	S71045	major prion-related prot
14	60.5	85.2	253	S53633	major prion-related prot
15	60.5	85.2	253	S53631	major prion-related prot
16	60.5	85.2	253	S53630	major prion-related prot
17	60.5	85.2	253	S53630	major prion-related prot
18	60.5	85.2	253	S71055	major prion-related prot
19	60.5	85.2	253	S53633	major prion-related prot
20	60.5	85.2	253	S53634	major prion-related prot
21	60.5	85.2	253	S53635	major prion-related prot
22	60.5	85.2	253	S53617	major prion-related prot
23	60.5	85.2	253	S53614	major prion-related prot
24	60.5	85.2	253	S53616	major prion-related prot
25	60.5	85.2	254	U7H1H	major prion-related prot
26	60.5	85.2	254	A34759	major prion-related prot
27	60.5	85.2	254	A34759	major prion-related prot
28	60.5	85.2	254	A34759	major prion-related prot
29	60.5	85.2	257	A33545	major prion-related prot

30	59.5	83.8	252	161848	major prion-related prot
31	59.5	83.8	252	UC6175	major prion-related prot
32	59.5	83.8	256	S37149	major prion-related prot
33	59.5	83.8	256	A54281	major prion-related prot
34	59.5	83.8	257	U01900	major prion-related prot
35	59.5	83.8	260	S53629	major prion-related prot
36	59.5	83.8	264	S37137	major prion-related prot
37	59.5	79.6	256	U02068	major prion-related prot
38	56.5	79.6	264	A54330	major prion-related prot
39	41	57.7	400	132705	major prion-related prot
40	41	57.7	738	E86294	major prion-related prot
41	41	57.7	745	G72453	major prion-related prot
42	40	56.3	746	H66330	major prion-related prot
43	39	54.9	144	AH1997	major prion-related prot
44	39	54.9	906	S03313	major prion-related prot
45	38	53.5	176	T26212	major prion-related prot

ALIGNMENTS

RESULT 1
A53892
Prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 13-Aug-1999
C:Accession: A53892
R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <L1A>
A:Cross-references: GB:M20313; NID:G206391; PID:AAA41947.1; PID:G206392
C:Superfamily: major prion protein

Query Match
Best Local Similarity 93.3%; Pred. No. 0.0037;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14
DB 151 CWNITIKQHTVTTT 165

RESULT 2

S71041
Major prion protein - black-handed spider monkey (fragment)
C:Species: Ateles geoffroyi (black-handed spider monkey)
C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C:Accession: S71041; S53630
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: EMBL:U08309; NID:G474376; PIN:AA60097.1; PID:G474377
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Puschner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53630
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, R, 196-231 <SCW>
A:Cross-references: EMBL:U08309
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 232;

Best Local Similarity 93.3%; Pred. No. 0.0038;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
|||||
Db 163 CWNITIKOHTVTTT 177

RESULT 3

major prion protein - doucoucouli (fragment)
C/Species: Aotus f. virgatus (doucoucouli, night monkey, owl monkey)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53633; S71042
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53633
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-239 <SCH>
A/Cross-references: EMBL:U08293
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71042
A/Molecule type: DNA
A/Residues: 1-202, 'E', 204-239 <SCW>
A/Cross-references: EMBL:U08293; NID:G474344; PIDN:AAC50082.1; PID:G474345
C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 239;
Best Local Similarity 93.3%; Pred. No. 0.0039;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
|||||
Db 171 CWNITIKOHTVTTT 185

RESULT 4

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C/Accession: S71056; S53621
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G474365
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 241;
Best Local Similarity 93.3%; Pred. No. 0.0039;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
|||||

Db 172 CWNITIKOHTVTTT 186

RESULT 5

major prion protein - Callicebus molloch (fragment)
C/Species: Callicebus molloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C/Accession: S71048; S53632
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G475586
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53632
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312
C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 241;
Best Local Similarity 93.3%; Pred. No. 0.0039;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
|||||
Db 172 CWNITIKOHTVTTT 186

RESULT 6

major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53627; S71043
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53627
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: EMBL:U08291
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71043
A/Molecule type: DNA
A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50080.1; PID:G474341
C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 245;
Best Local Similarity 93.3%; Pred. No. 0.004;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14
|||||
Db 171 CWNITIKOHTVTTT 185

RESULT 7

S71045

major prion protein - Cercopithecus diana
 C/Species: Cercopithecus diana
 C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S71045; S53628
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71045
 A/Molecule type: DNA
 A/Residues: 1-245 <SCH>
 A/Cross-references: EMBL:U08292; NID:G474342; PID:AC50081.1; PID:G474343
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53628
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 8-10, 'L', '12-202', 'R', '204-239' <SCW>
 A/Cross-references: EMBL:U08292
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 245;
 Best Local Similarity 93.3%; Pred. No. 0.0041;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTTT 14
 |||||
 Db 171 CWNITIKQHTVTTTT 185

RESULT 8

major prion protein - common marmoset
 C/Species: Callithrix jacchus (common marmoset)
 C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53634; S71047
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53634
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-252 <SCH>
 A/Cross-references: EMBL:U08304
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71047
 A/Molecule type: DNA
 A/Residues: 1-209, 'E', '211-252' <SCW>
 A/Cross-references: EMBL:U08304; NID:G474366; PIDN:AC50092.1; PID:G474367
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 252;
 Best Local Similarity 93.3%; Pred. No. 0.0041;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTTT 14
 |||||
 Db 178 CWNITIKQHTVTTTT 192

RESULT 9

major prion protein - brown capuchin
 C/Species: Cebus apella (brown capuchin, black-capped capuchin)
 C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53631; S71044
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53631
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-252 <SCH>
 A/Cross-references: EMBL:U08295
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71044
 A/Molecule type: DNA
 A/Residues: 1-209, 'E', '211-252' <SCW>
 A/Cross-references: EMBL:U08295; NID:G474348; PIDN:AC50084.1; PID:G474349
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 252;
 Best Local Similarity 93.3%; Pred. No. 0.0041;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTTT 14
 |||||
 Db 178 CWNITIKQHTVTTTT 192

RESULT 10

major prion protein precursor - human
 N/Alternate names: 11k amyloid protein; 27-30kialoglycoprotein; PrP 27-30; PrP 33-35C
 C/Species: Homo sapiens (man)
 C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 11-Aug-2003
 C/Accession: A24173; A40372; A05017; S14078; I54322; I68597; I58184; I79633; I7
 R/Kretschmar, H.A.; Stowling, L.E.; Westaway, D.; Stubblefield, W.H.; Prusiner, S.B.; D
 DNA 5, 315-324, 1986
 A/Title: Molecular cloning of a human prion protein cDNA.
 A/Reference number: A24173; MUID:86300093; PMID:3755672
 A/Accession: A24173
 A/Molecule type: mRNA
 A/Residues: 1-253 <KRE>
 A/Cross-references: GB:M18699; NID:9190467; PIDN:AAA60182.1; PID:9190468
 R/Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
 Am. J. Hum. Genet. 49, 320-329, 1991
 A/Title: Genomic structure of the human prion protein gene.
 A/Reference number: A40372; MUID:91326137; PMID:1676248
 A/Accession: A40372
 A/Status: not compared with conceptual translation
 A/Molecule type: DNA
 A/Residues: 1-80, 89-253 <PUC>
 A/Cross-references: GB:X83416; NID:9747846; PIDN:CA58442.1; PID:9747847
 A/Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not
 R/Liao, Y.C.T.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
 Science 233, 364-367, 1986
 A/Reference number: A05017; MUID:86261778; PMID:3014653
 A/Accession: A05017
 A/Molecule type: mRNA
 A/Residues: 8-117, 119-253 <LIA>
 A/Cross-references: GB:D00015; NID:9220015; PIDN:BA00011.1; PID:9220016; GB:M13667; NI
 R/Migliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, C.; Serban, D.; Prusiner, S.B.; Farlo
 EMO 4, 10, 513-519, 1991
 A/Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) i
 A/Reference number: S14078; MUID:91160504; PMID:1672107
 A/Accession: S14078
 A/Molecule type: protein
 A/Residues: 58-72, 'X', '74-76', 'XX', '79', 'XXX', '83-86', '111-128', 'V', '130-150' <TAG>
 R/Diedrich, J.F.; Knopman, D.S.; Li, J.; Li, J.; Li, J.; Li, J.; Li, J.; Li, J.; Li, J.; Li, J.
 Hum. Mol. Genet. 1, 443-444, 1992
 A/Title: Deletion in the prion protein gene in a demented patient.
 A/Reference number: I54322; MUID:93250789; PMID:1363802
 A/Accession: I54322
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: DNA

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A:Residues: 9-83,92-240 <RES>
A:Cross-references: GB:M81929; NID:G190517; PIDN:AA859442.1; PID:G190518
A:Accession: 168597
A:Status: translated from GB/EMBL/DBDUT
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M81930; NID:G190519; PIDN:AA859443.1; PID:G190520
B:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Shermata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutacide in
A:Reference number: 158135; MUID:92140671; PMID:11736177
A:Accession: 158135
A:Status: preliminary; translated from GB/EMBL/DBDUT
A:Molecule type: DNA
A:Residues: 51-91, 'PHGGGGMGPHGGMGOPHGGMGOPHGGMGOPHGGMGOPHGGMG' <RES>
A:Cross-references: GB:S80539; NID:G244698; PIDN:AA821334.1; PID:G244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldfarb, D.; Shergold, G.D.; Wills, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, a
A:Reference number: 159184; MUID:92073400; PMID:1683708
A:Accession: 159184
A:Status: translated from GB/EMBL/DBDUT
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71206; NID:G239877; PIDN:AA820521.1; PID:G239878; GB:S71210; NIT
C:Genetics:
A:Gene: GDB:PRNP; CUD; PRIP
A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20P12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeld-Jakob disease (CJD), Gerstmann-Strausler
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl
F:1-32/Domain: signal sequence #status predicted <SIG>
F:123-230/Product: major prion protein #status predicted <MAT>
F:154-92/Region: 8-residue repeats (P-H-G-G-G-W-G-Q)
F:223-253/Domain: carboxyl-terminal propetide #status predicted <CTP>
F:119-214/Dissulfide bonds: #status predicted
F:118,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (n mature form
Query Match 85.2%; Score 60.5; DB 1; Length 253;
Best Local Similarity 93.3%; Pred. No.0.0041;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
QY 1 CWNITIKQ-TVTTTT 14
Db 179 CWNITIKQHTVTTTT 193
RESULT 11
137032
major prion protein precursor - gorilla
C:Species: Gorilla gorilla (gorilla)
C:Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
R:Accession: 137032
R:Cervanakov, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 1215-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental
A:Reference number: 136907; MUID:95083661; PMID:7991600
A:Accession: 137032
A:Status: preliminary; translated from GB/EMBL/DBDUT
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: EMBL:U015166; NID:G563208; PIDN:AA868633.1; PID:G563209
C:Superfamily: major prion protein
Query Match 85.2%; Score 60.5; DB 2; Length 253;
Best Local Similarity 93.3%; Pred. No.0.0041;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
QY 1 CWNITIKQ-TVTTTT 14

```

```

Db          179 CVAITIKQHTVTTT 193
|||||
RESULT 12
prion protein - siamang
S53635
C:Species: Hylobates syndactylus (siamang)
C>Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 13-Aug-1999
A:Accession: S53635
R:Schaetzl, H.W.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53635
A>Status: nucleic acid sequence not shown; translation not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08308; NID:g474374; PIDN:AACS0096.1; PID:g474375
A>Note: The source was designated as Symphalangus syndactylus
A>Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
C:Superfamily: major prion protein

Query Match      85.2%; Score 60.5; DB 2; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0041;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY          1 CVAITIKQ-TVTNTT 14
|||||
Db          179 CVAITIKQHTVTTT 193
|||||

RESULT 13
major prion protein precursor - chimpanzee
I61847
C:Species: Pan troglodytes (chimpanzee)
C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 11-Aug-2003
A:Accession: I61847; S71060; S53615
R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I61847
A>Status: translated from GB/EMBL/DBBT
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: EMBL:U15039; NID:g609303; PIDN:AAA68632.1; PID:g609304
R:Scharzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71060
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08296; NID:g474350; PIDN:AACS0085.1; PID:g474351
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53615
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210; 'R', 212-253 <SCH>
A:Cross-references: EMBL:U08296
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      85.2%; Score 60.5; DB 2; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0041;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY          1 CVAITIKQ-TVTNTT 14
|||||
Db          179 CVAITIKQHTVTTT 193
|||||

```

RESULT 14

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 11-Aug-2003

C:Accession: 184423; S53622; S71054

R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A:Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 116907; MUID:95083661; PMID:7991600

A:Accession: 184423

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: EMBL:U15163; NID:G595850; PIDN:AA68635.1; PID:G595851

R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schaetzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71054

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:G474372; PIDN:AA68635.1; PID:G474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 85.2%; Score 60.5; DB 2; Length 253;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

Db 179 CWNITIKQHTVTTTT 193

RESULT 15

S53618

major prion protein - Colobus guereza

C:Species: Colobus guereza

C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53618; S71046

R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53618

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08297

R:Schaetzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71046

A:Molecule type: DNA

A:Residues: 1-210, 'E', 212-253 <SCW>

A:Cross-references: EMBL:U08297; NID:G474352; PIDN:AA68635.1; PID:G474353

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 85.2%; Score 60.5; DB 2; Length 253;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

Db 179 CWNITIKQHTVTTTT 193

Search completed: April 30, 2004, 15:32:09
Job time: 11.2083 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:28:59 ; Search time 31.2083 Seconds

(without alignments)
124.347 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71

Sequence: 1 CVNTIKQTVTTT 14

Scoring table:

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Gapop 10.0 , Gapext 0.5

Searched: 1138120 seqs, 27189581 residues

Total number of hits satisfying chosen parameters: 1138120

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	22	9	US-09-988-842-8
2	60.5	85.2	23	9	US-09-988-842-10
3	60.5	85.2	23	9	US-09-988-842-11
4	60.5	85.2	33	14	US-10-116-061-36
5	60.5	85.2	117	14	US-10-050-902-348
6	60.5	85.2	117	14	US-10-050-902-348
7	60.5	85.2	117	14	US-10-050-902-348
8	60.5	85.2	124	14	US-10-050-902-324
9	60.5	85.2	124	14	US-10-050-902-324
10	60.5	85.2	124	15	US-10-346-190-93
11	60.5	85.2	162	9	US-09-745-003-10
12	60.5	85.2	163	9	US-09-745-003-10
13	60.5	85.2	163	15	US-10-104-047-2013
14	60.5	85.2	164	9	US-09-745-003-12
15	60.5	85.2	194	14	US-10-029-386-11981

16	60.5	85.2	225	14	US-10-301-488A-25	Sequence 25, Appl
17	60.5	85.2	226	14	US-10-205-194-121	Sequence 121, Appl
18	60.5	85.2	245	14	US-10-304-630-15	Sequence 5, Appl
19	60.5	85.2	245	14	US-10-304-630-15	Sequence 15, Appl
20	60.5	85.2	252	14	US-10-304-630-13	Sequence 13, Appl
21	60.5	85.2	252	14	US-10-304-630-17	Sequence 17, Appl
22	60.5	85.2	253	9	US-09-904-987-3	Sequence 3, Appl
23	60.5	85.2	253	9	US-09-919-172-57	Sequence 57, Appl
24	60.5	85.2	253	9	US-09-943-906-2	Sequence 2, Appl
25	60.5	85.2	253	12	US-10-450-679-6	Sequence 6, Appl
26	60.5	85.2	253	14	US-10-304-630-1	Sequence 1, Appl
27	60.5	85.2	253	14	US-10-304-630-2	Sequence 2, Appl
28	60.5	85.2	253	14	US-10-304-630-3	Sequence 3, Appl
29	60.5	85.2	253	14	US-10-304-630-4	Sequence 4, Appl
30	60.5	85.2	253	14	US-10-304-630-7	Sequence 7, Appl
31	60.5	85.2	253	14	US-10-304-630-8	Sequence 8, Appl
32	60.5	85.2	253	14	US-10-304-630-9	Sequence 9, Appl
33	60.5	85.2	253	14	US-10-304-630-10	Sequence 10, Appl
34	60.5	85.2	253	14	US-10-304-630-11	Sequence 11, Appl
35	60.5	85.2	253	14	US-10-304-630-12	Sequence 12, Appl
36	60.5	85.2	253	14	US-10-304-630-14	Sequence 14, Appl
37	60.5	85.2	253	14	US-10-304-630-16	Sequence 16, Appl
38	60.5	85.2	253	14	US-10-304-630-18	Sequence 18, Appl
39	60.5	85.2	253	14	US-10-304-630-19	Sequence 19, Appl
40	60.5	85.2	253	14	US-10-301-488A-21	Sequence 21, Appl
41	60.5	85.2	253	14	US-10-301-488A-22	Sequence 22, Appl
42	60.5	85.2	253	14	US-10-301-488A-32	Sequence 32, Appl
43	60.5	85.2	253	15	US-10-410-997A-8	Sequence 8, Appl
44	60.5	85.2	253	15	US-10-346-190-79	Sequence 79, Appl
45	60.5	85.2	253	15	US-10-435-602-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-09-988-842-8
; Sequence 8, Application US/09988842
; Patent No. US20020143105A1
GENERAL INFORMATION:
APPLICANT: Johansson, Jan
TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
FILE REFERENCE: 12125-002001
CURRENT APPLICATION NUMBER: US/09/988,842
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: US 60/251,662
PRIOR FILING DATE: 2000-12-06
PRIOR APPLICATION NUMBER: US 60/253,695
PRIOR FILING DATE: 2000-11-20
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 22
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetically generated peptide
US-09-988-842-8
Query Match 85.2%; Score 60.5; DB 9; Length 22;
Best Local Similarity 93.3%; Pred. No. 0.0025; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;
QY 1 CVNTIKQTVTTT 14
Db 7 CVNTIKQTVTTT 21
RESULT 2
US-09-988-842-10
; Sequence 10, Application US/09988842
; Patent No. US20020143105A1

```

; GENERAL INFORMATION:
; APPLICANT: Johansen, Jan
; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
; FILE REFERENCE: 12125-002001
; CURRENT APPLICATION NUMBER: US/09/988,842
; CURRENT FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: US 60/251,662
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/253,695
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 10
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated peptide
US-09-988-842-10

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Query Match      85.2%; Score 60.5; DB 9; Length 23;
Best Local Similarity 93.3%; Pred. No. 0.0026;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
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Db      8 CWNITIKQHTVTTT 22

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RESULT 3
US-09-988-842-11
; Sequence 11, Application US/09988842
; Parent No. US20020143105A1
; GENERAL INFORMATION:
; APPLICANT: Johansen, Jan
; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
; FILE REFERENCE: 12125-002001
; CURRENT APPLICATION NUMBER: US/09/988,842
; CURRENT FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: US 60/251,662
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/253,695
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 11
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated peptide
US-09-988-842-11

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Query Match      85.2%; Score 60.5; DB 9; Length 23;
Best Local Similarity 93.3%; Pred. No. 0.0026;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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```

QY      1 CWNITIKQ-TVTTTT 14
         |||||
Db      8 CWNITIKQHTVTTT 22

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RESULT 4
US-10-116-061-36
; Sequence 36, Application US/10116061
; Publication No. US20030199013A1
; GENERAL INFORMATION:
; APPLICANT: Fishleigh, Robert V.
; APPLICANT: Robson, Barry
; APPLICANT: Mee, Roger P.
; TITLE OF INVENTION: Fragments of Prion Proteins

```

```

; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Penile & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentia Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/116,061
; FILING DATE: 05-Apr-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,701B
; FILING DATE: 02-JUN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Fanucci, Allan A.
; REGISTRATION NUMBER: 30,256
; REFERENCE/DOCKET NUMBER: 8080-007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 865-8864/9741
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 33 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 1
; OTHER INFORMATION: //label=X
; /note="X may be absent or present independently
; of Y and denotes one or amino acid(s)"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 33
; OTHER INFORMATION: //label=Y
; /note="Y may be absent or present independently
; of X and denotes one or more amino acid(s)"
; SEQUENCE DESCRIPTION: SEQ ID NO: 36:
US-10-116-061-36

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Query Match      85.2%; Score 60.5; DB 14; Length 33;
Best Local Similarity 93.3%; Pred. No. 0.0038;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
         |||||
Db      7 CWNITIKQHTVTTT 21

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RESULT 5
US-10-050-902-348
; Sequence 348, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Flossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004

```

```

CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
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Query Match      85.2% Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.015;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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Qy      1 CWNITIKQ-TVTTT 14
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Db      58 CWNITIKQHTVTTT 72
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```

RESULT 6
US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348
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Query Match      85.2% Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.015;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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Qy      1 CWNITIKQ-TVTTT 14
        |||||
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Db      58 CWNITIKQHTVTTT 72
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RESULT 7
US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89
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Query Match      85.2% Score 60.5; DB 15; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.015;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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```

Qy      1 CWNITIKQ-TVTTT 14
        |||||
Db      58 CWNITIKQHTVTTT 72
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RESULT 8
US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
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RESULT 12
US-09-745-003-11
; Sequence 11, Application US/09745003
; Patent No. US20020042122X1
; GENERAL INFORMATION:
; APPLICANT: Bazaan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: Pp2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 163
; TYPE: PRT

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; ORGANISM: Hamster.sp.
US-09-745-003-11

Query Match 85.2%; Score 60.5; DB 9; Length 163;
Best Local Similarity 93.3%; Pred. No. 0.021; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14
|||
Db 88 CWNITIKQHTVTTTT 102

RESULT 13

US-10-104-047-2013
; Sequence 2013, Application US/10104047
; Publication No. US20030236392A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: NO. US20030236392A1 full length cDNA
; FILE REFERENCE: H1-A0105
; CURRENT APPLICATION NUMBER: US/10/104,047
; CURRENT FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER:
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2013
; LENGTH: 163
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 85.2%; Score 60.5; DB 15; Length 163;
Best Local Similarity 93.3%; Pred. No. 0.021; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14
|||
Db 89 CWNITIKQHTVTTTT 103

RESULT 14
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazar, Fernando J
; TITLE OF INVENTION: Human Proteins, Related Reagents
; FILE REFERENCE: P:R2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match 85.2%; Score 60.5; DB 9; Length 164;
Best Local Similarity 93.3%; Pred. No. 0.022; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14
|||
Db 88 CWNITIKQHTVTTTT 102

RESULT 15
US-10-029-386-31981
; Sequence 31981, Application US/10029386
; Publication No. US20030194704A1
; GENERAL INFORMATION:

; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
; FILE REFERENCE: ABOMICA-X-2
; CURRENT APPLICATION NUMBER: US/10/029,386
; CURRENT FILING DATE: 2001-12-20
; NUMBER OF SEQ ID NOS: 34288
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 31981
; LENGTH: 194
; TYPE: PRT
; ORGANISM: Homo sapiens

; FEATURE:
; OTHER INFORMATION: MAP TO AL109808.2
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 7.2
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 2.3
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 2.3
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 15
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 3.5
; OTHER INFORMATION: SWISSPROT HIT: P04156, EVALU9.00e-59
US-10-029-386-31981

Query Match 85.2%; Score 60.5; DB 14; Length 194;
Best Local Similarity 93.3%; Pred. No. 0.026; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14
|||
Db 169 CWNITIKQHTVTTTT 183

Search completed: April 30, 2004, 15:35:04
Job time: 31.2083 secs

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 42 Seconds

(without alignments)
94.183 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71

Sequence: 1 CWNITIKQVTTT 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_29Jan04:*

- 1: Geneseq1980s:*
- 2: Geneseq1990s:*
- 3: Geneseq2000s:*
- 4: Geneseq2001s:*
- 5: Geneseq2002s:*
- 6: Geneseq2003s:*
- 7: Geneseq2003bs:*
- 8: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	22	5	AAU99430 Human pri
2	60.5	85.2	23	5	AAU99432 Mouse pri
3	60.5	85.2	23	5	AAU99433 Syrian ha
4	60.5	85.2	25	5	ABR81631 Prion mim
5	60.5	85.2	31	7	ADD24220 Human pri
6	60.5	85.2	33	2	AAK38045 Human pri
7	60.5	85.2	117	5	ABG94357 Modified
8	60.5	85.2	117	5	ABG80669 Human pri
9	60.5	85.2	117	7	ADD24196 Modified
10	60.5	85.2	124	5	ABG94340 Mouse mpr
11	60.5	85.2	124	5	ABG80652 Mouse ltr
12	60.5	85.2	124	2	ADD24200 mpr-EK-
13	60.5	85.2	142	2	AAW17686 Prion pro
14	60.5	85.2	142	2	AAW92807 Mouse rpr
15	60.5	85.2	163	7	ABR63859 Human pro
16	60.5	85.2	200	5	ABG31907 Human pri
17	60.5	85.2	208	3	AAU99430 Human pri
18	60.5	85.2	208	3	AAU99432 Mouse pri
19	60.5	85.2	208	3	AAU99433 Syrian ha
20	60.5	85.2	208	3	ABR81631 Prion mim
21	60.5	85.2	208	4	ADD24220 Human pri
22	60.5	85.2	208	5	AAK38045 Human pri
23	60.5	85.2	208	5	ABG94357 Modified
24	60.5	85.2	208	5	ABG80669 Human pri
25	60.5	85.2	209	5	ADD24196 Modified

26	60.5	85.2	211	4	ABR30801 Amino aci
27	60.5	85.2	212	4	ABR30802 Amino aci
28	60.5	85.2	225	6	ABR42793 Rat prion
29	60.5	85.2	226	7	ABR85240 Rat prion
30	60.5	85.2	245	4	ABR72342 Monkey pr
31	60.5	85.2	245	4	ABR72352 Cercopit
32	60.5	85.2	253	2	ABR66715 Human pri
33	60.5	85.2	253	2	ABR69660 Human pri
34	60.5	85.2	253	2	ABR85901 Human pri
35	60.5	85.2	253	2	AAU99430 Human pri
36	60.5	85.2	253	3	AAU99432 Mouse pri
37	60.5	85.2	253	3	AAU99433 Syrian ha
38	60.5	85.2	253	3	ABR81631 Prion mim
39	60.5	85.2	253	3	ADD24220 Human pri
40	60.5	85.2	253	4	AAK38045 Human pri
41	60.5	85.2	253	4	ABG94357 Modified
42	60.5	85.2	253	4	ABG80669 Human pri
43	60.5	85.2	253	4	ADD24196 Modified
44	60.5	85.2	253	4	ABG94340 Mouse mpr
45	60.5	85.2	253	4	ABG80652 Mouse ltr

ALIGNMENTS

RESULT 1	AAU99430 standard; peptide; 22 AA.
ID	AAU99430 standard; peptide; 22 AA.
AC	AAU99430;
DT	07-OCT-2002 (first entry)
XX	
DE	Human prion protein (3pre) helical segment.
XX	
KW	I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;
KW	cheta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;
KW	Alzheimer's disease; prion disease; scrapie; BSE;
KW	bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;
KW	fibrillation; aggregation; neuroprotective; PDB;
KW	protein databank code; 3pte; prion protein; human; hPrP.
XX	
OS	Homo sapiens.
XX	
PN	MO200241002-A2.
XX	
PD	23-MAY-2002.
XX	
PF	20-NOV-2001; 2001WO-GB005117.
XX	
PR	20-NOV-2000; 2000US-0253695P.
PR	06-DEC-2000; 2000US-0251662P.
XX	
PA	(ALPH-) ALPHABETA AB.
PA	(WHIT-) WHITE M P.
XX	
PI	White MP, Johansson J;
XX	
DR	WPI; 2002-519389/55.
XX	
PT	Identifying compounds that stabilize I-helix of discordant helix in
PT	polypeptide, by measuring amount of I-helix in sample containing
PT	discordant helix-containing polypeptide in presence and absence of
XX	compound.
XX	
PS	Example 1; Fig 2A; 55pp; English.
XX	
CC	The present invention relates to a method of identifying a compound that
CC	stabilizes an I-helical conformation of a discordant helix in a
CC	polypeptide, particularly amyloid beta-peptide (Abeta). The method
CC	comprises providing a test sample comprising a polypeptide that contains
CC	a discordant helix in the form of an I-helix, contacting the test sample
CC	with a test compound and determining the rate of decrease in the amount

CC of I-helix or the amount of I-helix present in the test sample. The
 CC method is useful for identifying a compound that stabilizes an I-helical
 CC conformation of a discordant helix in a polypeptide. Such compounds are
 CC useful for decreasing the rate of formation of theta-strand structures
 CC between at least two discordant helix-containing polypeptides, and for
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99426-AAU99446
 CC represent >9-residue discordant helical segments from various proteins
 XX

SQ Sequence 22 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 22;
 Best Local Similarity 93.3%; Pred. No. 0.0017;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 DB 7 CWNITIKQHTVTTTT 21

RESULT 2

ID AAU99432 standard; peptide; 23 AA.

AC AAU99432;

DT 07-OCT-2002 (first entry)

DE Mouse prion protein (1ag2) helical segment.

KM I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;
 KM theta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;
 KM Alzheimer's disease; prion disease; scrapie; BSE;
 KM bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;
 KM fibrillation; aggregation; neurotropic; neuroprotective; PDB;
 KM protein databank code; 1ag2; prion protein; mouse; mPrP.

XX Mus sp.

OS WO200241002-A2.

PN 23-MAY-2002.

XX 20-NOV-2001; 2001WO-GB005117.

XX 20-NOV-2000; 2000US-0253695P.

XX 06-DEC-2000; 2000US-0251662P.

XX (ALPH-) ALPHABETA AB.

XX (WHIT/) WHITE M P.

XX White MP, Johanson J;

XX WPI; 2002-519389/55.

PT Identifying compounds that stabilize I-helix of discordant helix in
 PT polypeptide, by measuring amount of I-helix in sample containing
 PT discordant helix-containing polypeptide in presence and absence of
 PT compound.

PS Example 1; Fig 2A; 55pp; English.

XX The present invention relates to a method of identifying a compound that
 CC stabilizes an I-helical conformation of a discordant helix in a
 CC polypeptide, particularly amyloid beta-peptide (Abeta). The method
 CC comprises providing a test sample comprising a polypeptide that contains
 CC a discordant helix in the form of an I-helix, contacting the test sample
 CC with a test compound and determining the rate of decrease in the amount
 CC of I-helix or the amount of I-helix present in the test sample. The
 CC method is useful for identifying a compound that stabilizes an I-helical
 CC conformation of a discordant helix in a polypeptide. Such compounds are
 CC useful for decreasing the rate of formation of theta-strand structures

CC between at least two discordant helix-containing polypeptides, and for
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99426-AAU99446
 CC represent >9-residue discordant helical segments from various proteins
 XX

SQ Sequence 23 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 23;
 Best Local Similarity 93.3%; Pred. No. 0.0017;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 DB 8 CWNITIKQHTVTTTT 22

RESULT 3

ID AAU99433 standard; peptide; 23 AA.

AC AAU99433;

DT 07-OCT-2002 (first entry)

DE Syrian hamster prion protein (1b10) helical segment.

KM I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;
 KM theta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;
 KM Alzheimer's disease; prion disease; scrapie; BSE;
 KM bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;
 KM fibrillation; aggregation; neurotropic; neuroprotective; PDB;
 KM protein databank code; 1b10; prion protein; syrian hamster; sPrP.

XX Mesocricetus auratus.

OS WO200241002-A2.

PN 23-MAY-2002.

XX 20-NOV-2001; 2001WO-GB005117.

XX 20-NOV-2000; 2000US-0253695P.

XX 06-DEC-2000; 2000US-0251662P.

XX (ALPH-) ALPHABETA AB.

XX (WHIT/) WHITE M P.

XX White MP, Johanson J;

XX WPI; 2002-519389/55.

PT Identifying compounds that stabilize I-helix of discordant helix in
 PT polypeptide, by measuring amount of I-helix in sample containing
 PT discordant helix-containing polypeptide in presence and absence of
 PT compound.

PS Example 1; Fig 2A; 55pp; English.

XX The present invention relates to a method of identifying a compound that
 CC stabilizes an I-helical conformation of a discordant helix in a
 CC polypeptide, particularly amyloid beta-peptide (Abeta). The method
 CC comprises providing a test sample comprising a polypeptide that contains
 CC a discordant helix in the form of an I-helix, contacting the test sample
 CC with a test compound and determining the rate of decrease in the amount
 CC of I-helix or the amount of I-helix present in the test sample. The
 CC method is useful for identifying a compound that stabilizes an I-helical
 CC conformation of a discordant helix in a polypeptide. Such compounds are
 CC useful for decreasing the rate of formation of theta-strand structures
 CC between at least two discordant helix-containing polypeptides, and for
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99426-AAU99446

CC represent >9-residue discordant helical segments from various proteins
 XX Sequence 23 AA;
 SQ Query Match 85.2%; Score 60.5; DB 5; Length 23;
 Best Local Similarity 93.3%; Pred. No. 0.0017;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CVNITIKQ-TVTTT 14
 DB 8 CVNITIKQHTVTTT 22

RESULT 4
 ABB81631
 ID ABB81631 standard; peptide; 25 AA.
 XX ABB81631;
 AC 25-SEP-2002 (first entry)
 XX Prion mimetic peptide SEQ ID NO.3.
 DE Prion mimetic peptide SEQ ID NO.3.
 XX Prion mimetic peptide; degradation; detection; TSE; infection;
 KM transmissible spongiform encephalopathy; prion protein; sterilisation;
 KM immunisation; Creutzfeldt-Jacob disease; kuru; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker syndrome; chronic wasting disease;
 KM bovine spongiform encephalopathy; feline spongiform encephalopathy;
 KM scrapie; transmissible mink encephalopathy.
 XX Synthetic.
 OS WO200253723-A2.
 PN 11-JUL-2002.
 XX 08-JAN-2002; 2002MO-GB000052.
 PF 08-JAN-2001; 2001GB-00000420.
 PR 26-FEB-2001; 2001GB-00004696.
 XX (MICR-) MICROBIOLOGICAL RES AUTHORITY.
 PA Raven NDH;
 XX WPI; 2002-557743/59.
 DR Inactivating transmissible spongiform encephalopathy (TSE) agent such as
 PT Creutzfeldt-Jacob disease, scrapie, kuru or Gerstmann-Strausler-
 PT Scheinker syndrome involves exposing agent to thermostable proteolytic
 PT enzyme.
 XX Example; Page 19; 41pp; English.
 PS The present invention describes a method (M1) for inactivating a
 XX transmissible spongiform encephalopathy (TSE) agent comprising exposing
 CC the TSE agent to a thermostable proteolytic enzyme. Also described: (1) a
 CC composition (I) for inactivating a TSE agent, comprising a thermostable
 CC proteolytic enzyme; (2) an antibody (II) specific for a prion dimer which
 CC does not bind to a prion monomer; and (3) a purified A TSE agent (M1) is
 CC useful for inactivating a TSE agent such as a prion. A TSE agent is
 CC Gerstmann-Strausler-Scheinker syndrome, kuru, fatal familial insomnia,
 CC Creutzfeldt-Jacob disease or its variant, bovine spongiform
 CC encephalopathy, scrapie, feline spongiform encephalopathy, chronic
 CC wasting disease or transmissible mink encephalopathy. (I) is useful for
 CC sterilising material contaminated with the TSE agent. A prion dimer is
 CC useful for examining a sample infected with or suspected to be infected
 CC by a prion protein, and for detecting prion infectivity, by detecting a
 CC prion dimer in the sample. A prion dimer is useful for producing (II), by
 CC immunising an animal with a prion dimer, obtaining its extract which
 CC contains (II), and isolating (II) from the extract. The method comprises
 CC obtaining an antibody preparation containing antibodies which bind a
 CC prion dimer, and removing (II) from the preparation. (M1) and (I) are

CC useful for inactivating TSE agents in potentially contaminated clinical
 CC waste and culled animal material. (M1) is useful for sterilising larger
 CC surface areas of apparatus, operating tables or even walls of rooms. The
 CC present sequence represents a prion mimetic peptide which is used in an
 CC example from the present invention in the preparation of antibodies
 CC including dimer preferential antibodies
 XX Sequence 25 AA;
 SQ Query Match 85.2%; Score 60.5; DB 5; Length 25;
 Best Local Similarity 93.3%; Pred. No. 0.0019;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CVNITIKQ-TVTTT 14
 DB 1 CVNITIKQHTVTTT 15

RESULT 5
 ADD24220
 ID ADD24220 standard; peptide; 31 AA.
 XX ADD24220;
 AC 15-JAN-2004 (first entry)
 XX Human prion protein PrP peptide #6.
 DE Vaccine composition; virus-like particle; core particle;
 XX first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jacob Disease; prion.
 XX Prion.
 OS WO2003059386-A2.
 PN 24-JUL-2003.
 XX 17-JAN-2003; 2003MO-EP000460.
 PF 18-JAN-2002; 2002US-00050302.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR A vaccine composition for preventing or treating prion diseases (e.g.
 XX Creutzfeldt-Jacob disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX Disclosure; Page 81; 246pp; English.
 PS This invention relates to a novel vaccine composition comprising a virus-
 XX like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jacob
 CC disease. The present sequence is that of a peptide fragment of a prion
 CC protein which may be used for the production of the vaccine of the
 CC invention.

SQ Sequence 31 AA;
 Query Match 85.2%; Score 60.5; DB 7; Length 31;
 Best Local Similarity 93.3%; Pred. No. 0.0024;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 OY 1 CWNITIKQ-TVTTTT 14
 DB 6 CWNITIKQHTVTTTT 20
 RESULT 6
 AAR38045
 ID AAR38045 standard; Procein, 33 AA.
 AC AAR38045;
 XX
 XX 25-MAR-2003 (revised)
 DT 14-OCT-1993 (first entry)
 XX
 XX Human prion protein region F #1.
 DE
 XX Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 KM Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KM immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KM resistance.
 XX
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 FH Misc-difference 1 /note= "One or more residues or may be absent"
 FT Misc-difference 2 /note= "May be absent"
 FT Misc-difference 3 /note= "May be absent"
 FT Misc-difference 4 /note= "May be absent"
 FT Misc-difference 5 /note= "May be absent"
 FT Misc-difference 29 /note= "May be absent"
 FT Misc-difference 30 /note= "May be absent"
 FT Misc-difference 31 /note= "May be absent"
 FT Misc-difference 32 /note= "May be absent"
 FT Misc-difference 33 /note= "May be absent"
 FT Misc-difference 33 /note= "One or more residue or may be absent"
 PN WO931155-A1.
 XX
 XX 10-JUN-1993.
 PD
 XX 03-DEC-1992; 92WO-GB002246.
 PF
 XX 03-DEC-1991; 91GB-00025747.
 PR 10-JUL-1992; 92GB-00014663.
 XX
 XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.
 PA
 XX Fishleigh RV, Robson B, Mee RP;
 PI
 XX WPI; 1993-196994/24.
 DR
 XX New polypeptide(s) contg. antigenic site of prion, protein - useful for
 PT treatment and diagnosis of mammalian encephalopathies e.g. Creutzfeldt-
 PT Jakob disease and Kuru.
 XX
 XX Claim 28; Page 74; 82pp; English.
 PS
 XX

CC The sequences given in AAR38041-48 represent polypeptides which are
 CC derived from an antigenic site, region F, of a prion protein. Prion
 CC proteins comprise six regions of interest (A-F), and two related frame
 CC shift peptide sequences caused by a repeating section in region B having
 CC a nucleic acid coding sequence frame shift mutation of +1 (Fsa) or -1
 CC (Fsb). These peptides (see also AAR38041-48) and antibodies raised
 CC against these may be used to treat or prevent spongiform encephalopathy
 CC in humans, sheep or cattle. They can be used to block cellular binding
 CC and aggregation of prion proteins and to stimulate the mammalian immune
 CC system. These peptides may be used to distinguish between the normal form
 CC of prion protein (PrPc) and the scrapie-associated form (PrPsc). These
 CC peptides may include rare or synthetic amino acids or a ratio-inverso
 CC peptide modification to improve resistance to enzymatic degradation.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 CC
 XX
 SQ Sequence 33 AA;
 Query Match 85.2%; Score 60.5; DB 2; Length 33;
 Best Local Similarity 93.3%; Pred. No. 0.0026;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 OY 1 CWNITIKQ-TVTTTT 14
 DB 7 CWNITIKQHTVTTTT 21
 RESULT 7
 ABG94357
 ID ABG94357 standard; protein, 117 AA.
 AC ABG94357;
 XX
 XX 10-DEC-2002 (first entry)
 DT
 XX Modified human prion protein fragment.
 DE
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytotoxic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 KM
 XX Homo sapiens.
 OS
 XX WO200256905-A2.
 PN
 XX 25-JUL-2002.
 PD
 XX 21-JAN-2002; 2002WO-1B000166.
 PF
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA
 XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 PI Flossek C;
 XX WPI; 2002-627351/67.
 DR
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 XX Disclosure; Page 441; 441pp; English.
 PS
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment

CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant beta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cyostatic, or
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention

CC Sequence 117 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 117;
 Best Local Similarity 93.3%; Pred. No. 0.0099;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14
 |||||
 Db 58 CWNITIKQHTVTTT 72

RESULT 8
 ABG80669

ID ABG80669 standard; protein; 117 AA.

AC ABG80669;

DT 29-NOV-2002 (first entry)

XX Human prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutant;
 KW graft versus host disease; IgE-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.

PM WO200256907-A2.

PD 25-JUL-2002.

PF 21-JAN-2002; 2002WO-IB000168.

PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288548P.
 PR 05-OCT-2001; 2001US-0326986P.
 PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVS) NOVARTIS PHARMA AG.

PA (MAUR/) MAURER P.

PA (LECH/) LECHNER F.

PA (ORTW/) ORTMANN R.

PA (LUEO/) LUEOEND R.

PA (STAU/) STAUFENBIEL M.

PA (FREY/) FREY P.

XX

PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Plosser C;
 DR WPI; 2002-636514/68.

XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.

PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified to
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

XX Sequence 117 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 117;
 Best Local Similarity 93.3%; Pred. No. 0.0099;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14
 |||||
 Db 58 CWNITIKQHTVTTT 72

RESULT 9
 ADD24196

ID ADD24196 standard; protein; 117 AA.

AC ADD24196;

DT 15-JAN-2004 (first entry)

XX Modified human prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PpP; PpP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mutain.

OS Synthetic.

OS prion.

PM WO2003059386-A2.

XX

XX 24-JUL-2003.
 PD 17-JAN-2003; 2003WO-EP000460.
 XX
 PF 18-JAN-2002; 2002US-00050902.
 XX
 PR 21-JAN-2002; 2002WO-1B000166.
 XX
 PR 08-JUL-2002; 2002US-0393725P.
 XX
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pellisoli E, Renner WA;
 XX
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 XX
 Query Match 85.2%; Score 60.5; DB 7; Length 117;
 Best Local Similarity 93.3%; Pred. No. 0.0099;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 QY 1 CWNITIKQ-TVTTTT 14
 DB 58 CWNITIKQHTVTTT 72
 XX
 RESULT 10
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrP protein.
 XX
 KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 XX
 XX vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-1B000166.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Seibel P,
 XX Piossek C;
 PI
 DR WPI; 2002-627351/67.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 438; 441pp; English.
 XX
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 XX
 Query Match 85.2%; Score 60.5; DB 5; Length 124;
 Best Local Similarity 93.3%; Pred. No. 0.01;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 QY 1 CWNITIKQ-TVTTTT 14
 DB 59 CWNITIKQHTVTTT 73
 XX
 RESULT 11
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 23-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 KW Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutagen;
 KW graft versus host disease; IGF-mediated allergic reaction; anapylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.


```

XX  MO20256907-A2.
PN
XX
XX  25-JUL-2002.
PD
XX
XX  21-JAN-2002; 2002WO-IB000168.
PF
XX  19-JAN-2001; 2001US-0262379P.
PR  04-MAY-2001; 2001US-0288549P.
PR  05-OCT-2001; 2001US-0326998P.
PR  07-NOV-2001; 2001US-0331045P.
XX
XX  (CYTO-) CYTOS BIOTECHNOLOGY AG.
PA  (NOVS) NOVARTIS PHARMA AG.
PA  (MAUR) MAURER P.
PA  (LECH) LECHNER F.
PA  (ORTM) ORTMANN R.
PA  (LUEO) LUEGEND R.
PA  (STAU) STAUFENBIEL M.
PA  (FREY) FREY P.
XX
XX  Maurer P, Lechner F, Ortmann R, Luegend R, Staufenbiel M, Frey P,
PI  Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C,
XX  WPI; 2002-636514/68.
XX
XX  Molecular antigen array used in the production of vaccines for infectious
XX  diseases.
XX
XX  Example 7; Page 415; 418pp; English.
XX
XX  The invention relates to a composition comprising: (a) a non-natural
XX  molecular scaffold comprising: (1) a core particle selected from: (1) a
XX  core particle of a non-natural origin; and (2) a core particle of natural
XX  origin; and (11) an organiser comprising at least one first attachment
XX  site, where the organiser is connected to the core particle by at least
XX  one covalent bond; (b) an antigen or antigenic determinant with at least
XX  one second attachment site, where the antigen or antigenic determinant is
XX  amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
XX  attachment site is selected from: (1) an attachment site not naturally
XX  occurring with the antigen or antigenic determinant; and (11) an
XX  attachment site naturally occurring with the antigen or antigenic
XX  determinant, where the second attachment site is capable of association
XX  through at least one non-peptide bond to the first attachment site; and
XX  where the antigen or antigenic determinant and the scaffold interact
XX  through the association to form an ordered and repetitive antigen array.
XX  Also included is a process for producing a non-naturally occurring
XX  ordered and repetitive antigen array. The composition is used in
XX  immunisation and as a vaccine for diseases such as influenza, graft
XX  versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
XX  respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
XX  acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
XX  systemic lupus erythematosus, inflammatory immune diseases, myasthenia
XX  gravis, immunoproliferative disease lymphadenopathy,
XX  angioimmunoproliferative lymphadenopathy, immunoclastic lymphadenopathy,
XX  rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
XX  osteoporosis and infectious diseases. The present sequence is a modified
XX  antigen for use in the array of the invention. The antigen is modified to
XX  possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
XX  containing N- or C-terminal linker peptide which serves as the attachment
XX  point to a virus like particle or bacterial protein (the scaffold
XX  protein)
XX
XX  Sequence 124 AA;
SQ

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```

Query Match      85.2%; Score 60.5; DB 5; Length 124;
Best Local Similarity 93.3%; Pred. No. 0.01;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

```

```

QY  1 CWNITIKQ-TVTTTT 14
    |||||
DB  59 CWNITIKQHTVTTTT 73

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RESULT 12
ADD24200
ID  ADD24200 standard; protein; 124 AA.
XX
XX  ADD24200;
AC
XX  15-JAN-2004 (first entry)
DT
XX
XX  mPrP-EK-FC* cleaved protein sequence.
DE
XX
XX  Vaccine composition; virus-like particle; core particle;
XX  first attachment site; antigen; antigenic determinant; prion protein;
XX  PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
XX  prion disease; Bovine Spongiform Encephalopathy; BSE;
XX  Creutzfeldt-Jakob Disease; prion; mPrP-EK-FC*.
OS  Unidentified.
OS  prion.
XX
XX  WO2003059386-A2.
PN
XX  24-JUL-2003.
PD
XX
XX  17-JAN-2003; 2003WO-EP000460.
PF
XX
XX  19-JAN-2002; 2002US-00050902.
PR  21-JAN-2002; 2002WO-IB000166.
PR  08-JUL-2002; 2002US-0393725P.
PR  18-JUL-2002; 2002US-0396590P.
XX
XX  (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX  Bachmann M, Maurer P, Pelliccioli E, Renner WA;
PI  WPI; 2003-598483/56.
XX
XX  A vaccine composition for preventing or treating prion diseases (e.g.
XX  Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
XX  phage) and at least one prion protein or peptide bound to the virus-like
XX  particle.
XX
XX  Example 13; SEQ ID NO 93; 246pp; English.
XX
XX  This invention relates to a novel vaccine composition comprising a virus-
XX  like or a core particle with at least one first attachment site and at
XX  least one antigen or antigenic determinant that is a prion protein (PrP)
XX  or its dimer, or a PrP peptide, the antigen or antigenic determinant
XX  being bound to the virus-like or core particle. The vaccine of the
XX  invention may have neuroprotective or anti-inflammatory activity. The
XX  composition is useful as a medicament or in manufacturing a medicament
XX  for the treatment or prevention of prion diseases. The prion diseases may
XX  include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
XX  Disease. The present sequence is the amino acid sequence of the cleaved
XX  protein translated from a mouse prion protein (PrP) vector (mPrP-EK-FC*)
XX  which was used during the exemplification of the invention.
XX
XX  Sequence 124 AA;
SQ

```

```

Query Match      85.2%; Score 60.5; DB 7; Length 124;
Best Local Similarity 93.3%; Pred. No. 0.01;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

```

```

QY  1 CWNITIKQ-TVTTTT 14
    |||||
DB  59 CWNITIKQHTVTTTT 73

```

```

RESULT 13
AAW17686
ID  AAW17686 standard; peptide; 142 AA.
XX
XX  AAW17686;
AC

```

XX 14-JAN-1998 (first entry)
 DT
 XX
 DE Prion protein peptide Hu 90-231.
 XX
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; Kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 PN WO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96WO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 XX
 SQ Sequence 142 AA;
 Query Match 85.2%; Score 60.5; DB 2; Length 142;
 Best Local Similarity 93.3%; Pred. No. 0.012;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 Oy 1 CWNITIKQ-TVTTT 14
 Db 90 CWNITIKQHTVTTT 104
 RESULT 14
 AAM92807
 ID AAM92807 standard; protein; 142 AA.
 XX
 AC AAM92807;
 XX
 DT 07-MAY-1999 (first entry)
 XX
 DE Mouse rPrP protein fragment.
 XX
 KM Murine; prion protein; PPMF; prion protein modulator factor; PrP; PrP(c);
 KM PrP(Sc); scrapie; isoform; pathogenic; inhibitor; screening;
 KM disease resistance; transgenic.
 XX
 OS Mus sp.
 XX
 PN WO9855132-A1.
 XX
 PD 10-DEC-1998.
 XX
 PF 18-MAY-1998; 98WO-US010104.
 XX

PR 02-JUN-1997; 97US-00868162.
 PR 12-MAY-1998; 98US-00076606.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Prusiner SB, Cohen FE, James TL, Kaneko K;
 XX
 DR WPI; 1999-080819/07.
 XX
 PT Novel Prion Protein Modulation Factor(s) - useful to increase speed and
 PT sensitivity of assays to detect pathogenic prion proteins.
 XX
 PS Disclosure; Fig 6A-B; 93pp; English.
 XX
 CC This invention describes a composition of Prion Protein Modulation Factor
 CC (PPMF) which binds the prion protein PrP(c) and facilitates a
 CC conformational change from PrP(c) to the scrapie isoform of the PrP
 CC protein, PrP(Sc). PPMF is involved in complex formation as the rate
 CC limiting step. The protein can therefore be used in assays to "speed
 CC up" formation of the complex and conversion of prion proteins to the
 CC pathogenic stage and thus can be used to rapidly detect the presence of
 CC pathogenic prion proteins in a sample. The compositions can be used to
 CC screen for compounds that inhibit PrP(Sc) formation. The gene can also be
 CC used to generate transgenic animals which are resistant to prion diseases
 XX
 SQ Sequence 142 AA;
 Query Match 85.2%; Score 60.5; DB 2; Length 142;
 Best Local Similarity 93.3%; Pred. No. 0.012;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 Oy 1 CWNITIKQ-TVTTT 14
 Db 90 CWNITIKQHTVTTT 104
 RESULT 15
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASRR02005570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 26-MAR-2002; 2002EP-00007401.
 XX
 PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Isogai T, Sugiyama T, Otsuki T, Makamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 DR WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic

PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.

XX Claim 1; Page: 222pp; English.

CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesising the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.

XX Sequence 163 AA;

Query Match 85.2%; Score 60.5; DB 7; Length 163;

Best Local Similarity 93.3%; Pred. No. 0.014; Mismatches 1; Gaps 1;

Matches 14; Conservative 0; Indels 1; Gaps 1;

OY 1 CUNITIKO-TVTTT 14

Db 89 CUNITIKOHVTTT 103

Search completed: April 30, 2004, 15:28:53
 Job time : 42 secs

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 29.4583 Seconds
(without alignments)
149.949 Million cell updates/sec

Title: US-09-603-832-5
Perfect score: 86
Sequence: 1 NDMDRYREMYR 14

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues
Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL_25:*
1: sp_archaea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phase:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_virus:*
16: sp_bacteriap:*
17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	253	11 Q9Z0T5	Q9Z0T5 meriones un
2	86	100.0	254	11 Q8VHV6	Q8VHV6 apodemus sy
3	86	100.0	254	11 Q9Z0T4	Q9Z0T4 sigmodon fu
4	86	100.0	254	11 Q9OYT9	Q9OYT9 mus musculu
5	77	89.5	124	6 Q8TU20	Q8TU20 vairecia var
6	77	89.5	185	6 Q97694	Q97694 cervus nipp
7	77	89.5	195	6 Q97693	Q97693 canis lupus
8	77	89.5	195	6 Q97903	Q97903 addax nasom
9	77	89.5	202	6 Q97696	Q97696 lama glama
10	77	89.5	202	6 Q97908	Q97908 capra nubia
11	77	89.5	204	6 Q97629	Q97629 odocoileus
12	77	89.5	204	6 Q97817	Q97817 odocoileus
13	77	89.5	204	6 Q97818	Q97818 odocoileus
14	77	89.5	209	6 Q8TV02	Q8TV02 camelus dro
15	77	89.5	211	6 Q77787	Q77787 antilocapra
16	77	89.5	212	6 Q97698	Q97698 cervus elap

17	77	89.5	213	6 Q9TV04	Q9TV04 canis famli
18	77	89.5	214	6 Q9TV03	Q9TV03 canis famli
19	77	89.5	215	11 Q81W3	Q81W3 spalax leuc
20	77	89.5	220	6 Q02825	Q02825 odocoileus
21	77	89.5	221	6 Q866V1	Q866V1 procavia ca
22	77	89.5	222	6 Q97913	Q97913 equus burch
23	77	89.5	222	6 Q7YRX1	Q7YRX1 procyon lot
24	77	89.5	223	6 Q97910	Q97910 hippocragus
25	77	89.5	223	6 Q866W3	Q866W3 sorex ciner
26	77	89.5	224	11 Q81W4	Q81W4 spalax leuc
27	77	89.5	226	6 Q97907	Q97907 gazella sub
28	77	89.5	227	6 Q97964	Q97964 equus cabal
29	77	89.5	227	6 Q97906	Q97906 equus cabal
30	77	89.5	235	6 Q97695	Q97695 giraffa cam
31	77	89.5	240	11 Q8VHV4	Q8VHV4 microtus ag
32	77	89.5	242	6 Q866U5	Q866U5 cyclops di
33	77	89.5	243	11 P97895	P97895 mesocricetu
34	77	89.5	245	6 Q9WZU7	Q9WZU7 odocoileus
35	77	89.5	246	6 Q866W9	Q866W9 cynocephalu
36	77	89.5	247	6 Q866V7	Q866V7 equus cabal
37	77	89.5	247	11 Q81W7	Q81W7 scirtus vul
38	77	89.5	248	6 Q866V6	Q866V6 dicerops bic
39	77	89.5	248	6 Q866V0	Q866V0 orycteropus
40	77	89.5	248	11 Q8VHV5	Q8VHV5 clethrionom
41	77	89.5	250	6 Q866V8	Q866V8 manis sp. p
42	77	89.5	251	6 Q866U5	Q866U5 cyclops di
43	77	89.5	254	6 Q978P8	Q978P8 oryctolagus
44	77	89.5	256	6 Q85PV7	Q85PV7 capra hircu
45	77	89.5	256	6 Q97TUS	Q97TUS ovis aries

ALIGNMENTS

RESULT 1
ID Q9Z0T5 PRELIMINARY; PRT; 253 AA.
AC Q9Z0T5;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-UTN-2003 (TREMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
OC Meriones.
OX NCBI_TaxID=10047;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Mofnner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
Schwarz T.F., Werner T., Scharzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL: A6117314; RAD1985.1;
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; prion; 1.
DR Pfam: PF03991; prion; 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON TER 253
SQ SEQUENCE 253 AA; 27747 MM; B44D16867A97307F CRC64;
Query Match 100.0%; Score 86; DB 11; Length 253;
Best Local Similarity 100.0%; Pred. NO. 3e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14
 DB 142 NDMEERYRENNYR 155

RESULT 2

OSVAV6 PRELIMINARY; PRT: 254 AA.
 AC OSVAV6; 08VAV6; 01-MAR-2002 (TrEMBLrel. 20, Created)
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
 DE 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 GN Prion protein.
 OS Apodemus sylvaticus (European woodmouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 OC Apodemus.
 ON NCBI_TaxID=10129;
 RX [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Ono G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nomo R.,
 RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
 RT "Easy transmission of sheep scrapie to wild rodents questions the
 RT species barrier concept in the epidemiology of transmissible
 RT spongiform encephalopathies.";
 RT Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AF367623; AAL57230.1;
 DR HSSP: P10279; IDWY;
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion.1.
 DR Pfam: PF03991; Prion.octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 SQ SEQUENCE 254 AA; 27857 MW; CB25658C47A0885 CRC64;

Query Match 100.0%; Score 86; DB 11; Length 254;
 Best Local Similarity 100.0%; Pred. No. 3e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14
 DB 143 NDMEERYRENNYR 156

RESULT 3

OSVAV6 PRELIMINARY; PRT: 254 AA.
 AC OSVAV6; 08VAV6; 01-MAY-1999 (TrEMBLrel. 10, Created)
 DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
 DE 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 GN Prion protein (Fragment).
 OS Sigmodon fulviventer (tawny-bellied cotton rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
 OC Sigmodon.
 ON NCBI_TaxID=89246;
 RX [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE:99303687; PubMed=10373359;
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 RT of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117324; AAD1995.1;
 DR HSSP: P04925; IAG2.
 DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; prion.1.
 DR Pfam: PF03991; Prion.octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR NON TER 254
 FT 254
 SQ SEQUENCE 254 AA; 27904 MW; 9EE7BD106BA3B97 CRC64;

Query Match 100.0%; Score 86; DB 11; Length 254;
 Best Local Similarity 100.0%; Pred. No. 3e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14
 DB 143 NDMEERYRENNYR 156

RESULT 4

OSVAV6 PRELIMINARY; PRT: 254 AA.
 AC OSVAV6; 08VAV6; 01-MAY-2000 (TrEMBLrel. 13, Created)
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
 DE 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 GN Long incubation prion protein.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 ON NCBI_TaxID=10090;
 RX [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE:99018115; PubMed=9799790;
 RA Lee I.Y., Westaway D., Smit A.F., Wang K., Seto J., Chen L.,
 RA Acharya C., Atkenner M., Baeklin D., Cooper C., Yao H., Prusiner S.B.,
 RA Hood L.E.;
 RT "Complete genomic sequence and analysis of the prion protein gene
 RT region from three mammalian species.";
 RT Genome Res. 8:1022-1037(1998).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99457485; PubMed=10525406;
 RA Moore R.C., Lee I.Y., Silverman G.L., Harrison P.M., Strome R.,
 RA Heinrich C., Karunaratne A., Pasternak S.H., Chishti M.A., Jiang Y.,
 RA Mastrogelo P., Wang K., Smit A.F.A., Katamine S., Carlson G.A.,
 RA Cohen F.E., Prusiner S.B., Melton D.W., Tremblay P., Hood L.E.,
 RA Westaway D.;
 RT "Ataxia in prion protein (PrP)-deficient mice is associated with
 RT upregulation of the novel PrP-like proteinoppel.";
 RT J. Mol. Biol. 292:797-817(1999).
 DR EMBL: U29187; AADA1440.1;
 DR HSSP: P04925; IAG2.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion.1.
 DR Pfam: PF03991; Prion.octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion.
 SQ SEQUENCE 254 AA; 28010 MW; DF90DCE586C6C0 CRC64;

Query Match 100.0%; Score 86; DB 11; Length 254;
 Best Local Similarity 100.0%; Pred. No. 3e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14
 DB 142 NDMEERYRENNYR 155

RESULT 5

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09TUD0
ID 09TUD0 PRELIMINARY; PRT; 124 AA.
AC 09TUD0;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Varecia variagata variagata.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Strepsirhini; Lemnidae; Varecia.
OX NCBI_TaxID=87289;
RN [1]
RP SEQUENCE FROM N.A.
RA Gilch S., Schatzl H.M.;
RT "Unusual prion protein occarepeat structure of the highly BSE-
RT susceptible Lemur monkey.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF177293; AAD54335.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR Pfam; PF03991; Prion_octapep; 3.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
FT NON TER 1
FT NON TER 1
SQ SEQUENCE 124 AA; 13436 MW; CC2CB8A5A85A7C94 CRC64;

Query Match
Best Local Similarity 92.9%; Score 77; DB 6; Length 124;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NDVEDRYRENNMYR 14
Db 76 NDVEDRYRENNMYR 89

RESULT 6
09T694 PRELIMINARY; PRT; 185 AA.
AC 09T694;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Cervus nippon dybowskii.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
OC Cervidae; Cervinae; Cervus.
OX NCBI_TaxID=88066;
RN [1]
RP SEQUENCE FROM N.A.
RA Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;
RT "Is codon 129 of prion protein polymorphic in human beings but not in
RT animals?";
RL Lancet 349;1603-1604(1997).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schatzl H.M., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289;1163-1176(1999).
DR EMBL; AF113941; AAD13289.1; -.
DR HSSP; P10279; IDWT.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR Pfam; PF03991; Prion_octapep; 5.
DR SMART; SM00157; PRP; 1.

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DR PROSITE; PS00291; PRION_1; 1.
FT NON TER 1
FT NON TER 185
SQ SEQUENCE 185 AA; 19870 MW; BB87C7658BC66E79 CRC64;

Query Match
Best Local Similarity 92.9%; Score 77; DB 6; Length 185;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NDVEDRYRENNMYR 14
Db 122 NDVEDRYRENNMYR 135

RESULT 7
09T693 PRELIMINARY; PRT; 195 AA.
AC 09T693;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Canis lupus (Gray wolf).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9612;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schatzl H.M., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289;1163-1176(1999).
DR EMBL; AF113939; AAD12063.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR Pfam; PF03991; Prion_octapep; 5.
DR SMART; SM00157; PRP_1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON TER 1
FT NON TER 195
SQ SEQUENCE 195 AA; 21097 MW; 9D18E4EB9A5D031 CRC64;

Query Match
Best Local Similarity 92.9%; Score 77; DB 6; Length 195;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NDVEDRYRENNMYR 14
Db 106 NDVEDRYRENNMYR 119

RESULT 8
09T903 PRELIMINARY; PRT; 195 AA.
AC 09T903;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Addax nasomaculatus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Hippotraginae; Addax.
OX NCBI_TaxID=59515;
RN [1]
RP SEQUENCE FROM N.A.
RT Tissue=Peripheral blood leukocytes;

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RX MEDLINE=99303687; PubMed=10373359;
 RA Koprner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1176(1999).
 DR EMBL: AF117309; AAD19980.1; --
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion.1.
 DR Pfam: PF03991; Prion.octapep; 5.
 DR SMART: SMO0157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 195
 FT NON_TER 195
 SQ SEQUENCE 195 AA; 21321 MW; 6A9BAC67E1AEC9A9 CRC64;

Query Match 89.5%; Score 77; DB 6; Length 195;
 Best Local Similarity 92.9%; Pred. No. 0.00054;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENMYR 14
 DB 110 NDYEDRYRENMYR 123

RESULT 9

ID 097696 PRELIMINARY; PRT; 202 AA.
 AC 097696;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Lama glama (Llama).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Lama.
 ON NCBI_TaxID=9844;
 RN [1]
 RP SEQUENCE FROM N.A.

RX MEDLINE=99303687; PubMed=10373359;
 RA Koprner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1176(1999).
 DR EMBL: AF113943; AAD13291.1; --
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion.1.
 DR Pfam: PF03991; Prion.octapep; 6.
 DR SMART: SMO0157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 202
 FT NON_TER 202
 SQ SEQUENCE 202 AA; 21860 MW; FC45232DB773F354 CRC64;

Query Match 89.5%; Score 77; DB 6; Length 202;
 Best Local Similarity 92.9%; Pred. No. 0.00056;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENMYR 14
 DB 106 NDYEDRYRENMYR 119

RESULT 10
 ID 097908 PRELIMINARY; PRT; 202 AA.
 AC 097908;

DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Capra nubiana (Nubian ibex).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Caprinae; Capra.
 ON NCBI_TaxID=72543;
 RN [1]
 RP SEQUENCE FROM N.A.

RC TISSUE=Peripheral blood leukocytes;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Koprner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1176(1999).
 DR EMBL: AF117319; AAD19990.1; --
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion.1.
 DR Pfam: PF03991; Prion.octapep; 5.
 DR SMART: SMO0157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 202
 FT NON_TER 202
 SQ SEQUENCE 202 AA; 21949 MW; DB0634A43B4DE77F CRC64;

Query Match 89.5%; Score 77; DB 6; Length 202;
 Best Local Similarity 92.9%; Pred. No. 0.00056;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENMYR 14
 DB 118 NDYEDRYRENMYR 131

RESULT 11

ID 097629 PRELIMINARY; PRT; 204 AA.
 AC 097629;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Odocoileus virginianus (White-tailed deer).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
 OC Cervidae; Odocoileinae; Odocoileus.
 ON NCBI_TaxID=9874;
 RN [1]
 RP SEQUENCE FROM N.A.

RC TISSUE=Brain;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "Prp alleles in free ranging and captive white tailed deer (Odocoileus
 virginianus).";
 RT Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AF091558; AAC69626.1; --
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion.1.
 DR Pfam: PF03991; Prion.octapep; 5.
 DR SMART: SMO0157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 204
 FT NON_TER 204
 SQ SEQUENCE 204 AA; 22154 MW; CA8A868F2B49C81E CRC64;

Query Match 89.5%; Score 77; DB 6; Length 204;
 Best Local Similarity 92.9%; Pred. No. 0.00056;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 123 NDYEDRYRENNYR 136

RESULT 12
 Q9TS17 PRELIMINARY; PRT; 204 AA.

ID Q9TS17
 AC Q9TS17
 DT 01-MAY-2000 (TRENBLrel. 13, Created)
 DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)
 DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.

OS Odocoileus virginianus (White-tailed deer).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
 OC Cervidae; Odocoileinae; Odocoileus.
 OC NCBI_TaxID=9874;

OX NCBI_TaxID=9874;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "PrP alleles in free ranging and captive white tailed deer (Odocoileus virginianus).";
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF091560; AAC69628.1; -
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_occaped; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 204 204
 SQ SEQUENCE 204 AA; 22184 MW; CA9BA283AF54081E CRC64;

Query Match 89.5%; Score 77; DB 6; Length 204;
 Best Local Similarity 92.9%; Pred. No. 0.00056;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 123 NDYEDRYRENNYR 136

RESULT 13
 Q9TS18 PRELIMINARY; PRT; 204 AA.

ID Q9TS18
 AC Q9TS18
 DT 01-MAY-2000 (TRENBLrel. 13, Created)
 DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)
 DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.

OS Odocoileus virginianus (White-tailed deer).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
 OC Cervidae; Odocoileinae; Odocoileus.
 OC NCBI_TaxID=9874;

OX NCBI_TaxID=9874;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "PrP alleles in free ranging and captive white tailed deer (Odocoileus virginianus).";
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF091559; AAC69627.1; -

DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_occaped; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 204 204
 SQ SEQUENCE 204 AA; 22181 MW; CA962B93FA84D4D3 CRC64;

Query Match 89.5%; Score 77; DB 6; Length 204;
 Best Local Similarity 92.9%; Pred. No. 0.00056;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 123 NDYEDRYRENNYR 136

RESULT 14
 Q9TV02 PRELIMINARY; PRT; 209 AA.

ID Q9TV02
 AC Q9TV02
 DT 01-MAY-2000 (TRENBLrel. 13, Created)
 DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)
 DT 01-UTN-2003 (TRENBLrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.

OS Camelus dromedarius (Dromedary) (Arabian camel).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.
 OC NCBI_TaxID=9838;

RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE; 9303687; PubMed; 10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Scharzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian prps reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF11940; AAD1528.1; -

DR HSSP; P10279; IDWY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_occaped; 5.
 DR PRINTS; PRO0341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 FT NON_TER 1 1
 FT NON_TER 209 209
 SQ SEQUENCE 209 AA; 22506 MW; 201E1AA9B38458EA CRC64;

Query Match 89.5%; Score 77; DB 6; Length 209;
 Best Local Similarity 92.9%; Pred. No. 0.00058;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 109 NDYEDRYRENNYR 122

RESULT 15
 Q77787 PRELIMINARY; PRT; 211 AA.

ID Q77787
 AC Q77787
 DT 01-NOV-1998 (TRENBLrel. 08, Created)
 DT 01-NOV-1998 (TRENBLrel. 08, Last sequence update)
 DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Antilocapra americana (Pronghorn).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Antilocapridae; Antilocapra.
 OK NCBI_taxID=9891;
 RN (1)
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "Prp gene of pronghorn antelope (Antilocapra americana) contains 6
 octapeptide repeats.";
 RL Submitted (Sep-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF090852; AAC43030.1; -
 DR HSSP; P10279; IDMY.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion_1.
 DR Pfam; PF03991; Prion_octapep; 6.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 211 AA; 22832 MW; B9E147AD9A6752 CRC64;

 Query Match 89.5%; Score 77; DB 6; Length 211;
 Best Local Similarity 92.9%; Pred. No. 0.00058;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYRENNYR 14
 ||:|||||
 DB 131 NDYEDRYRENNYR 144

Search completed: April 30, 2004, 15:31:21
 Job time : 30.4583 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 10.203 Seconds

(without alignments)
131.920 Million cell updates/sec

Title: US-09-603-832-5

Perfect score: 86

Sequence: 1 NDWEDRYRENNMR 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 203366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 203366

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	226	2 A53892	prion-related prot
2	86	100.0	254	2 A23544	major prion protei
3	77	89.5	232	2 S71041	major prion protei
4	77	89.5	239	2 S53633	major prion protei
5	77	89.5	241	2 S71056	major prion protei
6	77	89.5	241	2 S71048	major prion protei
7	77	89.5	245	2 S53627	major prion protei
8	77	89.5	245	2 S71045	major prion protei
9	77	89.5	252	2 I61848	major prion protei
10	77	89.5	252	2 UC6175	prion protein - ra
11	77	89.5	252	2 S53634	major prion protei
12	77	89.5	252	2 S53631	major prion protei
13	77	89.5	253	2 I84423	major prion protei
14	77	89.5	253	2 S53618	major prion protei
15	77	89.5	253	2 S53619	major prion protei
16	77	89.5	253	2 S53620	major prion protei
17	77	89.5	253	2 S71055	major prion protei
18	77	89.5	253	2 S53623	major prion protei
19	77	89.5	253	2 S53624	major prion protei
20	77	89.5	253	2 S53616	major prion protei
21	77	89.5	254	1 UHUYTH	major prion protei
22	77	89.5	254	1 A34758	prion protein - ch
23	77	89.5	254	2 B34759	prion protein - go
24	77	89.5	256	2 S37149	major prion protei
25	77	89.5	256	2 A54281	major prion protei
26	77	89.5	257	2 A23545	major prion protei
27	77	89.5	257	2 JQ190C	major prion protei
28	77	89.5	260	2 S53629	major prion protei
29	77	89.5	260	2 S53629	major prion protei

30	72	83.7	256	2 JU0268	major prion protei
31	72	83.7	264	2 S37137	prion protein - gr
32	67	77.9	253	1 UHUY	major prion protei
33	67	77.9	253	2 I37032	major prion protei
34	67	77.9	253	2 S53635	prion protein - si
35	67	77.9	253	2 I61847	major prion protei
36	67	77.9	253	2 S53617	major prion protei
37	67	77.9	253	2 S53614	major prion protei
38	67	77.9	264	2 A54330	major prion protei
39	55	64.0	447	2 A64934	Succinylarginine d
40	55	64.0	447	2 C90935	hypothetical prote
41	55	64.0	447	2 G85783	hypothetical prote
42	48	55.8	447	2 AG0709	Succinylarginine d
43	46	53.5	703	2 A64351	hypothetical prote
44	44.5	51.7	267	2 G90537	lipoprotein (impor
45	44	51.2	218	2 S10613	ribosomal protein

ALIGNMENTS

RESULT 1
A53892
Prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 13-Aug-1999
C:Accession: A53892
R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A:Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LHA>
A:Cross-references: GB:M20313; NID:G206391; PID:AAA41947.1; PID:G206392
C:Superfamily: major prion protein

Query Match 100.0%; Score 86; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 2.7e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENNMR 14
DB 115 NDWEDRYRENNMR 128

RESULT 2

A23544
major prion protein precursor - mouse
N:Alternate names: PrP; Scrapie prion
C:Species: Mus musculus (house mouse)
C:Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 11-Aug-2003
C:Accession: A23544; A23544; S02521; A22315
R:Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.
Cell 51, 651-662, 1987
A:Title: Distinct prion proteins in short and long scrapie incubation period mice.
A:Reference number: A23544; MUID:88052869; PMID:2890436
A:Accession: A23544
A:Molecule type: DNA
A:Residues: 1-254 <MES>
A:Cross-references: GB:M18070; NID:G200528; PID:AAA39997.1; PID:G200529
A:Experimental source: strains NMW and I/JmJ
A:Note: the sequence shown is from the NMW strain; the sequence from the I/JmJ strain d
R:Locher, C.; Chesebro, B.; Race, R.; Keith, J.M.
Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986
A:Reference number: A23544; MUID:86313583; PMID:3462700
A:Accession: A23544
A:Molecule type: mRNA
A:Residues: 1-254 <LOC>
A:Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.
Eur. J. Biochem. 172, 271-277, 1988
A:Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain

A/Accession: S02521; MUID:88166695; PMID:2894984
 A/Species: S02522
 A/Molecule type: protein
 A/Residues: 1-254 <HOB>
 R/Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.;
 Nature 315, 331-333, 1985
 A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u
 A/Reference number: A22315; MUID:85213844; PMID:3923361
 A/Accession: A22315
 A/Molecule type: mRNA
 A/Residues: 87-132, 'V', 134-164 <CHB>
 C/Superfamily: major prion protein
 C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
 F.1-23/Domain: signal sequence #status predicted <SIG>
 F.23-231/Product: major prion protein #status predicted <MAT>
 F.232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F.178-213/Dsulfide bonds: #status predicted
 F.180,196/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F.231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 86; DB 2; Length 254;
 Best Local Similarity 100.0%; Pred. No. 3e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 142 NDWEDRYRENNYR 155

RESULT 3

major prion protein - black-handed spider monkey (fragment)
 C/Species: Ateles geoffroyi (black-handed spider monkey)
 C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S71041; S53630
 R/Schaeztl, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71041
 A/Molecule type: DNA
 A/Residues: 1-232 <SCH>
 A/Cross-references: EMBL:U08309; NID:g474376; PIDN:AAC50097.1; PID:g474377
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53630
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-194, 'R', 196-231 <SCW>
 A/Cross-references: EMBL:U08309
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 232;
 Best Local Similarity 92.9%; Pred. No. 7.3e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 127 NDWEDRYRENNYR 140

RESULT 4

major prion protein - douroucouli (fragment)
 C/Species: Aotus trivirgatus (douroucouli, night monkey, owl monkey)
 C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53633; S71042
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53633
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-239 <SCH>
 A/Cross-references: EMBL:U08293
 R/Schaeztl, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71041
 A/Molecule type: DNA
 A/Residues: 1-202, 'E', 204-239 <SCW>
 A/Cross-references: EMBL:U08293; NID:g474344; PIDN:AAC50082.1; PID:g474345
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 239;
 Best Local Similarity 92.9%; Pred. No. 7.6e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 135 NDWEDRYRENNYR 148

RESULT 5

major prion protein - mandrill (fragment)
 C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
 C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S71056; S53621
 R/Schaeztl, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71056
 A/Molecule type: DNA
 A/Residues: 1-241 <SCH>
 A/Cross-references: EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g474365
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53621
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-203, 'R', 205-240 <SCW>
 A/Cross-references: EMBL:U08303
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 241;
 Best Local Similarity 92.9%; Pred. No. 7.6e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENNYR 14
 ||:|||||
 Db 136 NDWEDRYRENNYR 149

RESULT 6

major prion protein - Callithrix jacchus (fragment)
 C/Species: Callithrix jacchus (Callithrix jacchus)
 C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S71048; S53632
 R/Schaeztl, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71048
 A/Molecule type: DNA
 A/Residues: 1-241 <SCH>
 A/Cross-references: EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g475586
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53612
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-203, 'R', 205-240 <SCW>
 A:Cross-references: EMBL:U08312
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 241;
 Best Local Similarity 92.9%; Pred. No. 7.6e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDVEDRYRENNYR 14
 ||:|||||
 Db 136 NDYEDRYRENNYR 149

RESULT 7

major prion protein - green monkey
 C:Species: Cercopithecus aethiops (green monkey, grivet)
 C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S53627; S71043
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53627
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-245 <SCH>
 A:Cross-references: EMBL:U08291
 R:Schaetzl, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71043
 A:Molecule type: DNA
 A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
 A:Cross-references: EMBL:U08291; NID:9474340; PIDN:AA50080.1; PID:9474341
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 245;
 Best Local Similarity 92.9%; Pred. No. 7.8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDVEDRYRENNYR 14
 ||:|||||
 Db 135 NDYEDRYRENNYR 148

RESULT 8

major prion protein - Cercopithecus diana
 C:Species: Cercopithecus diana
 C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S71045; S53628
 R:Schaetzl, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71045
 A:Molecule type: DNA
 A:Residues: 1-245 <SCH>
 A:Cross-references: EMBL:U08292; NID:9474342; PIDN:AA50081.1; PID:9474343
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53628
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA

A:Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
 A:Cross-references: EMBL:U08292
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 245;
 Best Local Similarity 92.9%; Pred. No. 7.8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDVEDRYRENNYR 14
 ||:|||||
 Db 135 NDYEDRYRENNYR 148

RESULT 9

major prion protein precursor - common squirrel monkey
 C:Species: Saimiri sciureus (common squirrel monkey)
 C:Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
 C:Accession: I61848
 R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; I
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental
 A:Reference number: I61848
 A:Accession: I61848
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-252 <RES>
 A:Cross-references: EMBL:U15165; NID:9595852; PIDN:AAA68636.1; PID:9595853
 C:Superfamily: major prion protein

Query Match 89.5%; Score 77; DB 2; Length 252;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDVEDRYRENNYR 14
 ||:|||||
 Db 142 NDYEDRYRENNYR 155

RESULT 10

prion protein - rabbit
 C:Species: Oryctolagus cuniculus (domestic rabbit)
 C:Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 13-Aug-1999
 C:Accession: J66175
 R:Loftus, B.; Rogers, M.
 Gene 184, 215-219, 1997
 A:Title: Characterization of a prion protein (PrP) gene from rabbit; a species with app
 A:Reference number: J66175; MUID:97183665; PMID:9031631
 A:Accession: J66175
 A:Molecule type: DNA
 A:Residues: 1-252 <LOF>
 A:Cross-references: GB:U08334; NID:91490412; PIDN:AA04697.1; PID:91490413
 C:Comment: This protein is a cellular protein, it is involved in the neurodegenerative
 C:Keywords: disulfide bond; prion

Query Match 89.5%; Score 77; DB 2; Length 252;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDVEDRYRENNYR 14
 ||:|||||
 Db 142 NDYEDRYRENNYR 155

RESULT 11

major prion protein - common marmoset
 C:Species: Callithrix jacchus (common marmoset)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53631; S71047
 R/Schaefer, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53634
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-252 <SCH>
 A/Cross-references: EMBL:U08304
 R/Schaefer, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71047
 A/Molecule type: DNA
 A/Residues: 1-209, 'E', 211-252 <SCW>
 A/Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 252;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMDRYRYRNNMYR 14
 ||:|||||
 Db 142 NDYEDRYRNNMYR 155

RESULT 12
 S53631

major prion protein - brown capuchin
 C/Species: Cebus apella (brown capuchin, black-capped capuchin)
 C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53631; S71044
 R/Schaefer, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53631
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-252 <SCH>
 A/Cross-references: EMBL:U08295
 R/Schaefer, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71044
 A/Molecule type: DNA
 A/Residues: 1-209, 'E', 211-252 <SCW>
 A/Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 252;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMDRYRYRNNMYR 14
 ||:|||||
 Db 142 NDYEDRYRNNMYR 155

RESULT 13
 184423

major prion protein precursor - rhesus macaque
 C/Species: Macaca mulatta (rhesus macaque)
 C/Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 11-Aug-2003
 C/Accession: 184423; S53622; S71054
 R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600
 A/Accession: 184423
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: DNA
 A/Residues: 1-253 <RES>
 A/Cross-references: EMBL:U15163; NID:g595850; PIDN:AA68635.1; PID:g595851
 R/Schaefer, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 U. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53622
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-210, 'R', 212-253 <SCH>
 A/Cross-references: EMBL:U08307
 R/Schaefer, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71054
 A/Molecule type: DNA
 A/Residues: 1-253 <SCW>
 A/Cross-references: EMBL:U08307; NID:g474372; PIDN:AAC50095.1; PID:g474373
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 253;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMDRYRYRNNMYR 14
 ||:|||||
 Db 143 NDYEDRYRNNMYR 156

RESULT 14
 S53618

major prion protein - Colobus guereza
 C/Species: Colobus guereza
 C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53618; S71046
 R/Schaefer, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 U. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53618
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-253 <SCH>
 A/Cross-references: EMBL:U08297
 R/Schaefer, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71046
 A/Molecule type: DNA
 A/Residues: 1-210, 'E', 212-253 <SCW>
 A/Cross-references: EMBL:U08297; NID:g474352; PIDN:AAC50086.1; PID:g474353
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 253;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMDRYRYRNNMYR 14
 ||:|||||
 Db 143 NDYEDRYRNNMYR 156

RESULT 15

S53619
 major prion protein - Presbytis francoisi
 C/Species: Presbytis francoisi
 C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53619; S71057
R:Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U: Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53619
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-References: EMBL:U08302
R:Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71057
A:Molecule type: DNA
A:Residues: 1-210, 'E', 212-253 <SCW>
A:Cross-References: EMBL:U08302; NID:G1396067; PID:AA03105.1; PID:G1396068
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 253;
Best local similarity 92.9%; Pred. NO. 8e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
||:|||||||
DB 143 NDYEDRYRENMYR 156

Search completed: April 30, 2004, 15:32:08
Job time : 10.2083 secs

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 6.70833 Seconds
(without alignments)
108.668 Million cell updates/sec

Title: US-09-603-832-5
Perfect score: 86
Sequence: 1 NDMEDRYRENTMR 14

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 141681 seqs, 52070155 residues
Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: SwissProt_42:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	86	100.0	254	1	P04925 mus muscula
2	86	100.0	254	1	P13852 rattus norv
3	86	100.0	254	1	P09053 sigmodon hi
4	86	100.0	254	1	P09053 sigmodon hi
5	86	100.0	254	1	P09053 sigmodon hi
6	86	100.0	254	1	P09053 sigmodon hi
7	86	100.0	254	1	P09053 sigmodon hi
8	86	100.0	254	1	P09053 sigmodon hi
9	86	100.0	254	1	P09053 sigmodon hi
10	86	100.0	254	1	P09053 sigmodon hi
11	86	100.0	254	1	P09053 sigmodon hi
12	86	100.0	254	1	P09053 sigmodon hi
13	86	100.0	254	1	P09053 sigmodon hi
14	86	100.0	254	1	P09053 sigmodon hi
15	86	100.0	254	1	P09053 sigmodon hi
16	86	100.0	254	1	P09053 sigmodon hi
17	86	100.0	254	1	P09053 sigmodon hi
18	86	100.0	254	1	P09053 sigmodon hi
19	86	100.0	254	1	P09053 sigmodon hi
20	86	100.0	254	1	P09053 sigmodon hi
21	86	100.0	254	1	P09053 sigmodon hi
22	86	100.0	254	1	P09053 sigmodon hi
23	86	100.0	254	1	P09053 sigmodon hi
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25	86	100.0	254	1	P09053 sigmodon hi
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27	86	100.0	254	1	P09053 sigmodon hi
28	86	100.0	254	1	P09053 sigmodon hi
29	86	100.0	254	1	P09053 sigmodon hi
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31	86	100.0	254	1	P09053 sigmodon hi
32	86	100.0	254	1	P09053 sigmodon hi
33	86	100.0	254	1	P09053 sigmodon hi

ALIGNMENTS

Result ID	Query	% Match	Query Length	DB ID	Description
1	P04925	100.0	254	1	P04925 mus muscula
2	P13852	100.0	254	1	P13852 rattus norv
3	P09053	100.0	254	1	P09053 sigmodon hi
4	P09053	100.0	254	1	P09053 sigmodon hi
5	P09053	100.0	254	1	P09053 sigmodon hi
6	P09053	100.0	254	1	P09053 sigmodon hi
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23	P09053	100.0	254	1	P09053 sigmodon hi
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26	P09053	100.0	254	1	P09053 sigmodon hi
27	P09053	100.0	254	1	P09053 sigmodon hi
28	P09053	100.0	254	1	P09053 sigmodon hi
29	P09053	100.0	254	1	P09053 sigmodon hi
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31	P09053	100.0	254	1	P09053 sigmodon hi
32	P09053	100.0	254	1	P09053 sigmodon hi
33	P09053	100.0	254	1	P09053 sigmodon hi

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Wozny D.C., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahy J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywnicki M.I., Skalska U., Smallue D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.,
 RT "Generation and initial analysis of more than 15,000 full-length
 RT human and mouse cDNA sequences.";
 RT Proc. Natl. Acad. Sci. U.S.A. 99:16699-16903(2002).
 [6]
 RP SEQUENCE OF 87-164 FROM N.A.
 RX MEDLINE=85213844; PubMed=3923361;
 RA Cheebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,
 RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.,
 RT "Identification of scrapie prion protein-specific mRNA in scrapie-
 RT infected and uninfected brain.";
 RT Nature 315:331-333(1985).
 [7]
 RP STRUCTURE BY NMR OF 120-230.
 RX MEDLINE=96317593; PubMed=8700211;
 RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R.,
 RA Muehrich K.,
 RT "NMR structure of the mouse prion protein domain PrP(121-321).";
 RT Nature 382:180-182(1996).
 [8]
 RP STRUCTURE BY NMR OF 23-231.
 RX MEDLINE=97424376; PubMed=9280298;
 RA Riek R., Hornemann S., Wider G., Glockshuber R., Muehrich K.,
 RT "NMR characterization of the full-length recombinant murine prion
 RT protein, mPrP(23-231).";
 RT FEBS Lett. 413:282-288(1997).
 [9]
 RP HYDROXYLATION OF PRO-44.
 RX MEDLINE=20490364; PubMed=11032800;
 RA Gill A.C., Ritchie M.A., Hunt L.G., Steane S.E., Davies K.G.,
 RA Bocking S.P., Rhee A.G.O., Bennett A.D., Hope J.,
 RT "Post-translational hydroxylation at the N-terminus of the prion
 RT protein reveals presence of PrP structure in vivo.";
 RT EMBO J. 19:5324-5331(2000).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
 CC CREEFTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC EMBL: M18070; AAA3997.1; -
 CC EMBL: M18071; AAA3998.1; -
 CC EMBL: M13685; AAA3998.1; -
 CC EMBL: U29186; AAC02804.1; -
 CC EMBL: BC006703; AA06703.1; -
 CC EMBL: M30384; AAA3989.1; -
 CC PIR: A29668; A23544.
 CC PDB: 1AG2; 08-OCT-97.
 CC MGD: MGI:97769; Prnp.
 CC GO: GO:0005783; Cytoplasmic reticulum; IDA.

DR GO: GO:0005794; C:Golgi apparatus; IDA.
 DR GO: GO:0005886; C:plasma membrane; IDA.
 DR GO: GO:0005507; F:copper ion binding; IDA.
 DR GO: GO:0006979; P:response to oxidative stress; IDA.
 DR Interpro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03931; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PrP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Hydroxylation;
 KW Polymorphism; 3D-structure; Lipoprotein.
 FT SIGNAL 1 22
 FT CHAIN 23 230 MAJOR PRION PROTEIN.
 FT PROPEP 231 254 REMOVED IN NATURE FORM (BY SIMILARITY).
 FT MOD_RES 44 44 HYDROXYLATION (MAY NOT BE BIOLOGICALLY
 FT RELEVANT).
 FT LIPID 230 230 GPI-anchor amidated serine (By
 FT similarity).
 FT CARBOHYD 180 180 N-LINKED (GLCNAC. . .) (PROBABLE).
 FT CARBOHYD 156 196 N-LINKED (GLCNAC. . .) (PROBABLE).
 FT DISULFID 178 213
 FT DOMAIN 51 90
 FT REPEAT 51 58
 FT REPEAT 59 66
 FT REPEAT 67 74
 FT REPEAT 75 82
 FT REPEAT 83 90
 FT VARIANT 108 108 L -> F (LINKED TO LONG INCUBATION TIME).
 FT VARIANT 189 189 T -> V (LINKED TO LONG INCUBATION TIME).
 FT CONFLICT 133 133 M -> V (IN REF. 2 AND 6).
 FT TURN 124 126
 FT STRAND 128 129
 FT HELIX 143 152
 FT TURN 153 155
 FT STRAND 161 162
 FT HELIX 171 191
 FT TURN 192 194
 FT HELIX 199 221
 FT TURN 222 224
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 Query Match 100.0%; Score 86; DB 1; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1.3e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NMEDRYRENNYR 14
 DB 142 NMEDRYRENNYR 155
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 ID PRIO_RAT STANDARD; PRT; 254 AA.
 AC P13852;
 DT 01-JAN-1990 (Rel. 13; Created)
 DT 01-NOV-1997 (Rel. 35; Last sequence update)
 DT 15-MAR-2004 (Rel. 43; Last annotation update)
 DE Major prion protein precursor (PrP).
 GN PRNP OR PRN.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 CX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Altter and SJ/D; TISSUE=Liver;
 RX MEDLINE=9432359; PubMed=7909925;
 RA Gomi H., Ikeda T., Kunieda T., Itohara S., Prusiner S.B.,
 RA Yamanoi K.,
 RT "Prion protein (PrP) is not involved in the pathogenesis of


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RT  Spongiform encephalopathy in zitter rats."
RN  Neurosci. Lett. 166:171-174(1994).
RC  [2]
RP  SEQUENCE FROM N.A.
RC  STRAIN=Wistar; TISSUE=Liver;
RX  MEDLINE=7033369; PubMed=8879116;
RA  Sasaki K., Matsumoto Y., Hirota Y., Onodera T.;
RT  "Three-exon structure of the gene encoding the rat prion protein and
RL  its expression in tissues."
RT  Virus Genes 12:15-20(1996).
RN  [3]
RP  SEQUENCE OF 29-254 FROM N.A.
RX  MEDLINE=8803705; PubMed=2889648;
RA  Liao Y.-C., Tokes Z., Lim E., Lackey A., Woo C.H., Button J.D.,
RA  Clawson G.A.;
RT  "Cloning of rat 'prion-related protein' cDNA."
RL  Lab. Invest. 57:370-374(1987).
CC  -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC  -1- host genome and is expressed both in normal and infected cells.
CC  -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC  "rod".
CC  -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC  -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
CC  INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
CC  CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC  (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC  TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC  -1- SIMILARITY: Belongs to the prion family.
CC  -----
CC  This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC  -----
DR  EMBL; S69654; AAB30728.2; -
DR  EMBL; D50093; BAA08790.1; -
DR  EMBL; M2013; AAA41947.1; -
DR  PIR; A53892; A53892.
DR  HSSP; P04925; IAG2.
DR  InterPro; IPR000817; Prion.
DR  Pfam; PF00337; Prion; 1.
DR  Pfam; PF03991; Prion_octapep; 6.
DR  PRINTS; PRO0341; PRION.
DR  SMART; SMO0157; PRP; 1.
DR  PROSITE; PS00291; PRION 1; 1.
DR  PROSITE; PS00706; PRION 2; 1.
KW  Prion; Glycoprotein; GPI-anchor; Repeat; signal; Lipoprotein.
FT  SIGNAL 1 28
FT  CHAIN 29 231
FT  PROPEP 232 254
FT  LIPID 231 231
FT  CARBOHYD 181 181
FT  CARBOHYD 197 197
FT  DISULFID 179 214
FT  DOMAIN 51 91
FT  REPEAT 51 59
FT  REPEAT 60 67
FT  REPEAT 68 75
FT  REPEAT 76 83
FT  REPEAT 84 91
FT  REPEAT 91 91
SQ  SEQUENCE 254 AA; 27804 MW; 28f424d13bffa2c6 CRC64;
Query Match 100.0%; Score 86; DB 1; Length 254;
Best Local Similarity 100.0%; Pred.No. 1,3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1 NDMDERYRYENMYR 14
|||||

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Db 143 NMEDRYRENMYR 156

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RESULT 3
PRIO_SIGHI
ID PRIO_SIGHI STANDARD; PRT; 254 AA.
AC Q92073;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP).
GN PRNP OR PrP.
OS Sigmoidon hispidus (Hispid cotton rat).
OC Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmoidon.
OX NCBI_TaxId=42415;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Mofnar F., Weidenhofer G., Schneider R., von Bruhn A., Gluch S.,
PA Schwarz T.F., Wermeter T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "code".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JACOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL; AF117325; AAD19996.1; -.
CC DR HSSP; P04925; IAG2.
CC DR InterPro; IPR00817; Prion.
CC DR Pfam; PF00377; Prion; 1.
CC DR Pfam; PF03991; Prion octapep; 6.
CC DR PRINTS; PR00341; PRION.
CC DR SMART; SM00157; PrP; 1.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
CC FT SIGNAL 1 22
CC FT CHAIN 23 254
CC FT DOMAIN 51 91
CC FT REPEAT 51 59
CC FT REPEAT 60 67
CC FT REPEAT 68 75
CC FT REPEAT 76 83
CC FT REPEAT 84 91
CC FT DISULFID 179 214
CC FT CARBOHYD 181 181
CC FT CARBOHYD 197 197
CC SQ SEQUENCE 254 AA; 27874 MW; 50C464D516E572DF CRC64;
Query March 100.0%; Score 86; DB 1; Length 254;
Best local similarity 100.0%; Pred. No. 1,3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 NDMDRYRENNMYR 14
 Db 143 NDMDRYRENNMYR 156

RESULT 4

PRIO_ATEGE STANDARD, PRT, 232 AA.
 AC P40246;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Ateles geoffroyi (Black-handed spider monkey).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
 NX NCBI_TaxID=9509;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=9513906; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates";
 RJ J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE).
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL; U08309; AAC50097.1; -;
 CC PIR; S71041; S71041.
 CC HSSP; P04156; 1B1G.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC Pfam; PF03991; Prion, octapep; 5.
 CC PRINTS; PR00341; PRION.
 CC SMART; SM00157; PRP; 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 CC NON_TER 1
 CC SIGNAL 1
 CC CHAIN 15
 CC PROPEP 215
 CC LIPID 214
 CC DISULFID 163
 CC CARBOHYD 165
 CC CARBOHYD 181
 CC DOMAIN 44
 CC REPEAT 44
 CC REPEAT 51
 CC REPEAT 52
 CC REPEAT 60
 CC REPEAT 67
 CC REPEAT 75
 CC NON_TER 232
 CC SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 89.5%; Score 77; DB 1; Length 232;
 Best Local Similarity 92.9%; Pred. No. 3.2e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMDRYRENNMYR 14
 Db 127 NDMDRYRENNMYR 140

RESULT 5

PRIO_CERAT STANDARD, PRT, 238 AA.
 AC Q95145; Q95200;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus aethiops, and
 OS Macaca sylvanus (Barbary ape).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NX NCBI_TaxID=35222, 9546;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudant J.;
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE).
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL; U75384; AAB50623.1; -;
 CC EMBL; U75382; AAB50629.1; -;
 CC HSSP; P04925; 1AG2.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC Pfam; PF03991; Prion, octapep; 5.
 CC PRINTS; PR00341; PRION.
 CC SMART; SM00157; PRP; 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 CC NON_TER 1
 CC SIGNAL 1
 CC CHAIN 16
 CC PROPEP 216
 CC LIPID 215
 CC DISULFID 164
 CC CARBOHYD 166
 CC CARBOHYD 182
 CC DOMAIN 44
 CC REPEAT 44
 CC REPEAT 53
 CC REPEAT 52
 CC REPEAT 60
 CC NON_TER 2.
 CC SEQUENCE 238 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

```

FT REPEAT 61 68 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3B3C3E3531B CRC64;
Query Match
Best Local Similarity 89.5%; Score 77; DB 1; Length 238;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 NDWEDRYRNNYR 14
Db 128 NDYEDRYRNNYR 141

RESULT 6
PRIO_THESG STANDARD; PRT; 238 AA.
ID PRIO_THESG
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP OR PRP.
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OK NCBI_TaxID=9565;
RN (1)
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudamit J.;
RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75383; AAB50630.1; -.
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; prion; 1.
CC Pfam; PF03991; prion_octapep; 5.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; PRP; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
CC
CC NON_TER 1
CC SIGNAL 1
CC CHAIN 16 >238 MAJOR PRION PROTEIN.
CC DISULFID 16 199 BY SIMILARITY.
CC CARBOHYD 166 166 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
CC
CC REPEAT 44 52 0.
CC REPEAT 53 60 1.
CC REPEAT 61 68 2.
CC REPEAT 69 76 4.

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FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;
Query Match
Best Local Similarity 89.5%; Score 77; DB 1; Length 238;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 NDWEDRYRNNYR 14
Db 128 NDYEDRYRNNYR 141

RESULT 7
PRIO_AOTTR STANDARD; PRT; 239 AA.
ID PRIO_AOTTR
AC P40245;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Aotus trivirgatus (Night monkey) (Douroucoul).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.
OK NCBI_TaxID=9505;
RN (1)
RP SEQUENCE FROM N.A.
RA MEDLINE=95139056; PubMed=737269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Fusiner S.B.;
RL "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U08293; AAC50082.1; -.
CC PIR; S53633; S53633.
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; prion; 1.
CC Pfam; PF03991; prion_octapep; 6.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; PRP; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
CC
CC NON_TER 1
CC SIGNAL 1
CC CHAIN 16 >239 MAJOR PRION PROTEIN.
CC DISULFID 171 206 BY SIMILARITY.
CC CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC DOMAIN 44 83 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
CC
CC REPEAT 44 51 0.
CC REPEAT 52 59 1.
CC REPEAT 60 67 2.
CC REPEAT 67 76 3.

```

FT REPEAT 58 75 4.
 FT REPEAT 76 83 5.
 FT NON_TER 239
 SQ SEQUENCE 239 AA; 26246 MW; 2EFB77E354B7024A CRC64;

Query Match
 Best Local Similarity 92.9%; Score 77; DB 1; Length 239;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRYENMYR 14
 DB 135 NDMEDRYRYENMYR 148

RESULT 8
 ID P10_CALMO STANDARD; PRT; 241 AA.
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Callithecus moloch (Dusky titi).
 OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callithecinae;
 OC Callithecus.
 NC NCBI_Taxid=9523;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC EMBL: U08312; AAC50100.1; -
 CC PIR: S71048; S71048.
 CC HSSP: P04925; IAG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF03991; Prion; 1.
 CC Pfam: PF03991; Prion; octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC SMART: SM00157; PrP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
 KW NON_TER 1 1
 FT SIGNAL <1 15 BY SIMILARITY.
 FT CHAIN 16 >241 MAJOR PRION PROTEIN.
 FT DISULFID 172 207 BY SIMILARITY.
 FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
 Q.

FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;

Query Match
 Best Local Similarity 92.9%; Score 77; DB 1; Length 241;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRYENMYR 14
 DB 136 NDMEDRYRYENMYR 149

RESULT 9
 ID P10_MANSP STANDARD; PRT; 241 AA.
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Mandrillus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandrillus.
 NC NCBI_Taxid=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC EMBL: U08303; AAC50091.1; -
 CC PIR: S71056; S71056.
 CC HSSP: P04925; IAG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF03991; Prion; 1.
 CC Pfam: PF03991; Prion; octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC SMART: SM00157; PrP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
 KW NON_TER 1 1
 FT SIGNAL <1 15 BY SIMILARITY.
 FT CHAIN 16 223 MAJOR PRION PROTEIN.
 FT PROPEP 224 >241 REMOVED IN MATURE FORM (BY SIMILARITY).
 FT LIPID 223 223 GPI-anchor amidated serine (By

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FT DISULFID 172 207 similarity.
FT CARBOHYD 174 174 BY SIMILARITY.
FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 77 84 4.
FT NON TER 241 241 5.
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match 89.5%; Score 77; DB 1; Length 241;
Best Local Similarity 92.9%; Pred. No. 3.4e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENNYR 14
DB 136 NDYEDRYRENNYR 149

RESULT 10
PRIO CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C).
GN PRNP.
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OC Cercopithecus diana (Diana monkey);
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534, 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL, U08291; AAC50080.1; -
CC EMBL, U08292; AAC50081.1; -
CC PIR, S53627; S53627.
CC PIR, S71045; S71045.
CC HSSP, P04925; IAG2.
CC InterPro, IPR000817; Prion.
CC Pfam, PF00377; Prion, 1.
CC InterPro, IPR000817; Prion.
CC Pfam, PF00391; Prion octapep; 5.
CC PRINTS, PR00341; PRION.

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DR SMART; SM00157; Prp, 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
FT SIGNAL 1 22 BY SIMILARITY.
FT CHAIN 23 22 MAJOR PRION PROTEIN.
FT PROPEP 223 245 REMOVED IN MATURE FORM (BY SIMILARITY).
FT LIPID 222 222 GPI-anchor amidated serine (By
FT DISULFID 171 206 similarity).
FT CARBOHYD 173 173 BY SIMILARITY.
FT CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 51 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 51 59 Q.
FT REPEAT 60 67 1.
FT REPEAT 68 75 2.
FT REPEAT 76 83 3.
FT REPEAT 83 83 4.
SQ SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match 89.5%; Score 77; DB 1; Length 245;
Best Local Similarity 92.9%; Pred. No. 3.4e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENNYR 14
DB 135 NDYEDRYRENNYR 148

RESULT 11
PRIO CERMO STANDARD; PRT; 246 AA.
AC O95172; O95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C) (Fragment).
GN PRNP.
OS Cercopithecus mona. and
OC Cercopithecus neglectus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36226, 36227;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL, U75386; AAB50625.1; -
CC EMBL, U75387; AAB50626.1; -
CC HSSP, P04925; IAG2.
CC InterPro, IPR000817; Prion.
CC Pfam, PF00377; Prion, 1.

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CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC the European Bioinformatics Institute. There are no restrictions on its
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CC entities requires a license agreement (see http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U08295; AAC50084.1; -
CC DR PIR; S53631; S53631.
CC DR HSSP; P04156; 1B1G.
CC DR InterPro; IPR000817; Prion.
CC DR Pfam; PF03977; Prion_1.
CC DR Pfam; PF03991; Prion_octapep; 6.
CC DR PRINTS; PR00341; PRION.
CC DR SMART; SM00157; PRP; 1.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC FT SIGNAL 1 22
CC FT CHAIN 23 229 MAJOR PRION PROTEIN.
CC FT PROPEP 230 252 REMOVED IN MATURE FORM (BY SIMILARITY).
CC FT LIPID 229 229 GPI-anchor amidated serine (By
CC FT DISULFID 178 213 similarity).
CC FT CARBOHYD 180 180 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 196 196 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT DOMAIN 51 90 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
CC FT REPEAT 51 58 Q.
CC FT REPEAT 59 66 1.
CC FT REPEAT 67 74 2.
CC FT REPEAT 75 82 3.
CC FT REPEAT 83 90 4.
CC FT REPEAT 90 90 5.
CC SQ SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;

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Search completed: April 30, 2004, 15:23:27
 Job time : 6.70833 secs

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QY Query Match 89.5%; Score 77; DB 1; Length 252;
QY Best Local Similarity 92.9%; Pred. No. 3.6e-05;
QY Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 NDVEDRYRENNYR 14
QY ||:|||||
QY 142 NDVEDRYRENNYR 155

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:28:59 ; Search time 31.2083 Seconds

(without alignments)
124.347 Million cell updates/sec

Title: US-09-603-832-5

Sequence: 1 NDMEDRYRENMYR 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1138120 seqs, 277189581 residues

Total number of hits satisfying chosen parameters: 1138120

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	86	100.0	15	US-10-346-190-160	Sequence 160, App
2	86	100.0	16	US-10-346-190-164	Sequence 164, App
3	86	100.0	16	US-10-617-876-18	Sequence 18, App
4	86	100.0	26	US-10-346-190-163	Sequence 163, App
5	86	100.0	26	US-10-617-876-17	Sequence 17, App
6	86	100.0	124	US-10-050-902-324	Sequence 324, App
7	86	100.0	124	US-10-050-898-324	Sequence 324, App
8	86	100.0	124	US-10-346-190-93	Sequence 93, App
9	86	100.0	164	US-09-745-003-12	Sequence 12, App
10	86	100.0	225	US-10-301-488-25	Sequence 25, App
11	86	100.0	226	US-10-205-194-121	Sequence 121, App
12	86	100.0	254	US-09-943-906-1	Sequence 1, App1
13	86	100.0	254	US-10-438-628-2	Sequence 2, App1
14	86	100.0	254	US-10-106-574-5	Sequence 5, App1
15	86	100.0	254	US-10-106-574-6	Sequence 6, App1

16	86	100.0	254	13	US-10-106-574-7	Sequence 7, App1
17	86	100.0	254	13	US-10-106-574-8	Sequence 8, App1
18	86	100.0	254	14	US-10-355-780-10	Sequence 10, App1
19	86	100.0	254	14	US-10-304-630-20	Sequence 20, App1
20	86	100.0	254	14	US-10-304-630-21	Sequence 21, App1
21	86	100.0	254	14	US-10-304-630-22	Sequence 22, App1
22	86	100.0	254	14	US-10-301-488-24	Sequence 24, App1
23	86	100.0	254	15	US-10-410-907-9	Sequence 9, App1
24	86	100.0	254	15	US-10-410-907-10	Sequence 10, App1
25	86	100.0	254	15	US-10-346-190-87	Sequence 87, App1
26	86	100.0	254	15	US-10-435-602-1	Sequence 1, App1
27	86	100.0	350	14	US-10-050-902-323	Sequence 323, App
28	86	100.0	350	14	US-10-050-898-323	Sequence 323, App
29	86	100.0	350	15	US-10-346-190-92	Sequence 92, App1
30	86	100.0	439	13	US-10-115-984-2	Sequence 2, App1
31	77	89.5	15	15	US-10-346-190-117	Sequence 117, App
32	77	89.5	15	15	US-10-346-190-119	Sequence 119, App
33	77	89.5	15	15	US-10-346-190-121	Sequence 121, App
34	77	89.5	16	15	US-10-346-190-127	Sequence 127, App
35	77	89.5	16	15	US-10-346-190-129	Sequence 129, App
36	77	89.5	16	15	US-10-346-190-131	Sequence 131, App
37	77	89.5	16	16	US-10-617-876-24	Sequence 24, App1
38	77	89.5	25	15	US-10-346-190-116	Sequence 116, App
39	77	89.5	25	15	US-10-346-190-118	Sequence 118, App
40	77	89.5	25	15	US-10-346-190-120	Sequence 120, App
41	77	89.5	26	15	US-10-346-190-126	Sequence 126, App
42	77	89.5	26	15	US-10-346-190-128	Sequence 128, App
43	77	89.5	26	15	US-10-346-190-130	Sequence 130, App
44	77	89.5	26	16	US-10-617-876-23	Sequence 23, App1
45	77	89.5	31	14	US-10-116-061-8	Sequence 8, App1

ALIGNMENTS

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RESULT 1
US-10-346-190-160
; Sequence 160, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Pion Protein Carrier-Conjugates
; FILE REFERENCE: 1700 0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 160
; TYPE: PRT
; ORGANISM: Murine ppsort
US-10-346-190-160
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Query Match 100.0%; Score 86; DB 15; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1 NDMEDRYRENMYR 14
Db	2 NDMEDRYRENMYR 15

RESULT 2

US-10-346-190-164
; Sequence 164, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 164
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Murine cprshort
US-10-346-190-164

Query Match

Best Local Similarity 100.0%; Score 86; DB 15; Length 16;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14

DB 3 NDWEDRYRYENMYR 16

RESULT 3

US-10-617-876-18
; Sequence 18, Application US/10617876
; Publication No. US20040076611A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin F
; APPLICANT: Tissot, Alain
; APPLICANT: Pumpens, Paul
; APPLICANT: Cieles, Indulis
; APPLICANT: Rehofa, Regina
; TITLE OF INVENTION: Molecular Antigen Arrays
; FILE REFERENCE: 1700.0310001
; CURRENT APPLICATION NUMBER: US/10/617,876
; PRIOR FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 60/396,126
; PRIOR FILING DATE: 2002-07-17
; NUMBER OF SEQ ID NOS: 125
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO: 18
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: prion peptide "cprshort"
US-10-617-876-18

Query Match

Best Local Similarity 100.0%; Score 86; DB 16; Length 16;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14

DB 3 NDWEDRYRYENMYR 16

RESULT 4

US-10-346-190-163
; Sequence 163, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 163
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Murine cprlong
US-10-346-190-163

Query Match

Best Local Similarity 100.0%; Score 86; DB 15; Length 26;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14

DB 13 NDWEDRYRYENMYR 26

RESULT 5

US-10-617-876-17
; Sequence 17, Application US/10617876
; Publication No. US20040076611A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin F
; APPLICANT: Tissot, Alain
; APPLICANT: Pumpens, Paul
; APPLICANT: Cieles, Indulis
; APPLICANT: Rehofa, Regina
; TITLE OF INVENTION: Molecular Antigen Arrays
; FILE REFERENCE: 1700.0310001
; CURRENT APPLICATION NUMBER: US/10/617,876
; PRIOR FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 60/396,126
; PRIOR FILING DATE: 2002-07-17
; NUMBER OF SEQ ID NOS: 125
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO: 17
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: prion peptide "cprlong"
US-10-617-876-17

Query Match

Best Local Similarity 100.0%; Score 86; DB 16; Length 26;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
| | | | | | | | | | | | | | | |
Db 13 NDWEDRYRYENMYR 26

RESULT 6

US-10-050-902-324
; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebhel, Peter
; APPLICANT: Ploesek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrp construct
US-10-050-902-324

Query Match 100.0%; Score 86; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.5e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
| | | | | | | | | | | | | | | |
Db 23 NDWEDRYRYENMYR 36

RESULT 7

US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebhel, Peter
; APPLICANT: Ploesek, Christine
; APPLICANT: Ortman, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Steudtner, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04

; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Protein sequence of mPrp
US-10-050-898-324

Query Match 100.0%; Score 86; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.5e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
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Db 23 NDWEDRYRYENMYR 36

RESULT 8

US-10-346-190-93
; Sequence 93, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pellidori, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 93
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrp
US-10-346-190-93

Query Match 100.0%; Score 86; DB 15; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.5e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14
| | | | | | | | | | | | | | | |
Db 23 NDWEDRYRYENMYR 36

RESULT 9

US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: Prp2

CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 164
TYPE: PRT
ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 86; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 52 NDWEDRYRENMYR 65

RESULT 10
US-10-301-488A-25
Sequence 25, Application US/10301488A
Publication No. US20030166558A1
GENERAL INFORMATION:
APPLICANT: FRANGIONE, Blas
APPLICANT: MISNIEWSKI, Thomas
APPLICANT: SIGURDSSON, Einar
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
FILE REFERENCE: 5986/1K434U01
CURRENT APPLICATION NUMBER: US/10/301,488A
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/331,801
PRIOR FILING DATE: 2001-11-21
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PatentIn version 3.1
SEQ ID NO 25
LENGTH: 225
TYPE: PRT
ORGANISM: Rat
US-10-301-488A-25

Query Match 100.0%; Score 86; DB 14; Length 225;
Best Local Similarity 100.0%; Pred. No. 2.8e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 115 NDWEDRYRENMYR 128

RESULT 11
US-10-205-194-121
Sequence 121, Application US/10205194
Publication No. US20030134301A1
GENERAL INFORMATION:
APPLICANT: Warner-Lambert Company
APPLICANT: Lee, Kevin
APPLICANT: Dixon, Alstair
APPLICANT: Brooksbank, Robert
APPLICANT: Pinnock, Robert
TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain
FILE REFERENCE: NL-A-018201
CURRENT APPLICATION NUMBER: US/10/205,194
CURRENT FILING DATE: 5200-07-24
PRIOR APPLICATION NUMBER: GB 0118354.0
PRIOR FILING DATE: 2001-07-27
NUMBER OF SEQ ID NOS: 177
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 121
LENGTH: 226

TYPE: PRT
ORGANISM: Rattus norvegicus
FEATURE:
OTHER INFORMATION: Prp
US-10-205-194-121

Query Match 100.0%; Score 86; DB 14; Length 226;
Best Local Similarity 100.0%; Pred. No. 2.8e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 115 NDWEDRYRENMYR 128

RESULT 12
US-09-943-906-1
Sequence 1, Application US/09943906
Patent No. US20020150572A1
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony
Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Pish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,867
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-943-906-1

Query Match 100.0%; Score 86; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 142 NDWEDRYRENMYR 155

RESULT 13
US-10-438-628-2

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; Sequence 2, Application US/10438628
; Publication No. US20040048237A1
; GENERAL INFORMATION:
; APPLICANT: Lindquist et al.
; TITLE OF INVENTION: MAMMALIAN PRION PROTEINS AND TRANSGENIC MICE EXPRESSING THEM
; FILE REFERENCE: WBL-P01-004
; CURRENT FILING DATE: 2003-05-15
; PRIOR APPLICATION NUMBER: 60/380950
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/380953
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/419569
; PRIOR FILING DATE: 2002-10-17
; PRIOR APPLICATION NUMBER: 60/419574
; PRIOR FILING DATE: 2002-10-17
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-438-628-2

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Query Match          100.0%; Score 86; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 NMEDRYRENNYR 14
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Db      142 NMEDRYRENNYR 155

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RESULT 14
US-10-106-574-5
; Sequence 5, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-5

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Query Match          100.0%; Score 86; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 NMEDRYRENNYR 14
        |||||
Db      142 NMEDRYRENNYR 155

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RESULT 15
US-10-106-574-6
; Sequence 6, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8

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; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-6

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```

Query Match          100.0%; Score 86; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 NMEDRYRENNYR 14
        |||||
Db      142 NMEDRYRENNYR 155

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Job time : 32.2083 secs

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